Medicare Severity Grouper with Medicare Code Editor Software

Installation and User's Manual ICD-10 Version

For personal computers
Software version 37.2 August 2020

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ICD-10

Version 37.2

This Medicare Severity (MS) Grouper with Medicare Code Editor (MCE) ICD-10 software contains both ICD-9-CM and ICD-10 codes (see "Program versions (page 9)"). This software is intended to give users the opportunity to group and edit claims using ICD-9-CM, ICD-10-CM and ICD-10 PCS codes based on discharge date. If the discharge date is out of range for this component, the program will default to the current version.

About this document

Purpose of the manual

This manual is written to assist health information management professionals with an average level of computer knowledge in installing and using the Medicare Severity Grouper with Medicare Code Editor (MSG/MCE) software in a Microsoft® Windows® environment on a personal computer.

The documentation assumes you are familiar with Diagnosis Related Groups (DRGs) methodology for processing medical claims, and with MCE software's evaluation of patient data to help identify possible errors in coding.

Information in the manual

The manual begins with a brief introduction describing the functionality of MSG/MCE software. You are then given instructions to install the software, followed by chapters on processing claims data interactively and in batch. There is an Accessibility Features chapter for the visually impaired to assist them with interactive claim processing. An appendix is included that lists the Major Diagnostic Categories (MDCs) and DRGs in the current MS grouper with the DRG-associated cost weights.

Sequential steps in the manual to select an option use the "greater than" symbol. For example, rather than telling you to first go to the Start menu, select Programs, select Accessories, and finally select Notepad, that instruction would appear as:

❒   From the Start menu, select Programs > Accessories > Notepad.

Chapter 1: Introduction

The Medicare Severity Grouper with Medicare Code Editor (MSG/MCE) software edits medical record data to help identify coding errors and inconsistencies between clinical data and coding.

The software:

- Assigns the medical record to a Major Diagnostic Category (MDC) and a Diagnosis Related Group (DRG).

- Displays clinical edits that identify inconsistencies after evaluating a patient's principal diagnosis, any secondary diagnoses, surgical procedures, age, length of stay, sex, and discharge status for possible errors.

    Note: If some of these data items are missing, inaccurate results may occur.

- Displays the cost weight associated with the assigned DRG for each patient record.

- Processes medical record data either from a MS-DOS batch file or interactively in a Microsoft® Windows® environment.

Program versions

This release of MS grouper with MCE software for Windows-based personal computers supports the versions shown in the following table. To process a claim using a CMS grouper prior to version 16.0, you must use the earlier version of CMS Grouper with MCE software.

Please note: In order to be in synch with the MS Grouper version number, there is not a version 29 of the MCE.

Table 1.   Grouper versions in the program

MS grouper version	MCE version	Effective date range
37.2 (ICD-10)	37.2	08/01/2020–09/30/2020
37.1 (ICD-10)	37.1	04/01/2020–07/31/2020
37.0 (ICD-10)	37.0	10/01/2019–03/31/2020
36.0 (ICD-10)	36.0	10/01/2018–09/30/2019
35.0 (ICD-10)	35.0	10/01/2017–09/30/2018
34.0 (ICD-10)	34.0	10/01/2016–09/30/2017
33.0 (ICD-10)	33.0	10/01/2015–09/30/2016
32.0	32.0	10/01/2014–09/30/2015

MS grouper version	MCE version	Effective date range
31.0	31.0	10/01/2013–09/30/2014
30.0	30.0	10/01/2012–09/30/2013
29.0	28.0	10/01/2011–09/30/2012
28.0	27.0	10/01/2010–09/30/2011
27.0	26.0	10/01/2009–09/30/2010
26.0	25.0	10/01/2008–09/30/2009
25.1	24.1	04/01/2008–09/30/2008
25.0	24.0	10/01/2007–03/31/2008
24.0	23.0	10/01/2006–09/30/2007
23.0	22.0	10/01/2005–09/30/2006
22.0	21.0	10/01/2004–09/30/2005
21.0	20.0	10/01/2003–09/30/2004
20.0	19.0	10/01/2002–09/30/2003
19.0	18.0	10/01/2001–09/30/2002
18.0	17.0	10/01/2000–09/30/2001
17.0	16.0	10/01/1999–09/30/2000
16.0	15.1*	07/01/1999–09/30/1999
16.0	15.0	10/01/1998–06/30/1999

There are specific rules for the discharge date field as it relates to the discharge status and the version of software used to process a claim. See the "Data entry fields" table (page) for details.

Chapter 2: Installing the software

The Medicare Severity Grouper with Medicare Code Editor (MSG/MCE) software is completely self-installable on a stand-alone personal computer (PC). The installation must be performed by a person with Microsoft® Windows® administrative status.

Hardware and system requirements

The hardware and system requirements for the software are shown in the following table.

Table 2.   Hardware requirements

Component	Requirement
Operating system	Microsoft® Windows® 8.1 Microsoft Windows 7 (32 bit or 64 bit)
RAM	1 GB
Available disk space	220 MB
Monitor	Super VGA color (1024x768) resolution)
Windows permissions	Administrative status

Note: This software is not intended to operate in a networked environment.

Pre-installation note

I10 version users do not need to uninstall previous MSG MCE software. This version will work in parallel with other MSG MCE versions.

Installing the current software product

To install the current version of MS grouper with MCE software, follow the steps below. The installation automatically checks for the appropriate operating system, screen resolution, free disk space, administrator status, and previously installed MSG/MCE software versions. If any requirement is not met, you will see a message stating the nature of the problem during the installation. Correct the problem and begin the installation again. At any time, you can click Cancel to end the installation process.

1. Close all unnecessary applications running on your computer.

2. Download the MSGMCE PC zip file to your desktop or a local drive.

3. Unzip the file that was downloaded.

4. Select the MSGMCE PC folder from the unzipped file.

5. Double-click on MSGMCEInstaller.exe to start the software installation.

    The installation process begins and you see the Welcome screen.

    Note: If you see a User Account Control or Security Policy warning message pop up, select Yes or Allow to continue with the install.

6. On the Welcome screen, read the setup information, then select Next to continue.

7. Review the information on the Read Me screen, then select Next to continue.

8. On the Choose Install Location screen, specify the folder where you want to install the product.

    The default folder is C:\Program Files\MSG MCE SOFTWARE I10.

    ▪   To choose a different folder, select Browse... and browse to the folder you want to use.

    ▪   If you want to restore the default folder after making a change, select Restore Default Folder.

9. After choosing an install folder, select Install.

10. On the Install Complete screen, select Finish.

    Note: Some PCs may display a Program Incompatibility Assistant screen to verify if the program installed correctly, you may close this screen.

Description files

Files containing descriptions for diagnosis and procedure codes, DRGs, and MDCs are included as part of the installation process. The files, listed in the following table, are located in the Descriptions directory off the product directory. In the file names, xxx represents the current software version number.

Table 3.   Description files

File name	Contains descriptions for...
icd9dx.vxxx	ICD-9-CM diagnosis codes
icd9sg.vxxx	ICD-9-CM procedure codes
icd10dx.vxxx	ICD-10-CM diagnosis codes
icd10sg.vxxx	ICD-10-PCS procedure codes
icd9msdrg3.vxxx	ICD-9 3-digit DRGs
icd10msdrg3.vxxx	ICD-10 3-digit DRGs
icd9msdrg4.vxxx	ICD-9 4-digit DRGs
icd10msdrg4.vxxx	ICD-10 4-digit DRGs
msmdc.vxxx	MDCs

Note: Effective with v26.0, the titles for the DRG and MDC files were renamed to msdrg3.vXXX, msdrg4.vXXX and msmdc.vXXX. The "ms" prefix replaced the "hf" prefix.

Installed program functions

The installation places the three functions, shown in the following table, in the MSG MCE SOFTWARE I10 folder of Programs in the Start menu on your PC.

Table 4.   Installed program functions

Function	When to select the function
MSGMCE Interactive	Select to display the MS Grouper with Medicare Code Editor Software interactive data entry window.
MS-DOS prompt	Select to display a window containing a MS-DOS prompt to process records with batch processing. **Note**: If the MS-DOS prompt window does not appear when you select this function, verify that the environment path includes C:\WINDOWS\system32. If necessary, add it to the path.
Readme	Select to read product-specific information for the current release.

Accessing the functions

To access any of the functions in the previous table:

1. Go to the Start menu.

2. Select All Programs > MSG MCE SOFTWARE I10.

3. Select the appropriate function.

   ▪ For information on interactive claims processing, go to "Interactive data processing" (page 17)

      or

   ▪ For information on batch processing, go to "Batch processing" (page 41).

Uninstalling grouper versions

The following instructions explain how to uninstall this software.

1. Launch the uninstall process from the Windows Control Panel or from the product directory.

    a. To launch the uninstall process from the Control Panel

        1. Select Start > Control Panel > Programs > Programs and Features.
            (Windows 7 users, select Start > Control Panel > Programs and Features.)

        2. From the list of installed products, select MSG MCE SOFTWARE I10.

        3. Right-click, then select Uninstall/Change.

    b. To launch the uninstall process from the product directory

        1. Locate the product directory. The default directory is C:\Program Files\MSG MCE
            SOFTWARE I10.

        2. Double-click Uninstall.exe.

            Note: If you see a User Account Control warning message, select Yes to continue
            with the uninstall.

2. On the Welcome screen, read the uninstall information, then select Next to continue.

3. On the MSG MCE Software Uninstall screen, read the message summarizing the uninstall
    process, then select Uninstall.

4. On the Uninstall Complete screen, select Finish.

Chapter 3: Interactive data processing

The Medicare Severity Grouper with Medicare Code Editor (MSG/MCE) software processes medical record data by two methods:

- Interactively entering one record at a time;

- By batch, processing data from a group of records entered in an MS-DOS file.

This chapter discusses the interactive method of claim processing. Interactive processing enables you to correct invalid data or codes at the time a record is processed. This method uses a Microsoft® Windows® environment to enter data and view the output.

Sections in this chapter give you information on:

- Data entry, including field descriptions, information on menus and command buttons on the data entry window, and error messages.

- Program output, including an example output report and explanation of output fields, information on menus and command buttons on the data output window.

- Descriptions of the edits in the MSG/MCE software program.

Data entry

The information gives you field information and valid entry ranges where they exist, to assist in data entry. You will be able to navigate through the data entry window and perform functions, such as editing fields or copying text. Error messages that can occur during data entry are listed and explained.

Grouper selection

As you enter data, the program automatically selects the appropriate grouper for processing using the discharge date entered from the patient's medical record. For example, a discharge date of 11/14/2010 will call MS grouper 28 with an effective date range of 10/01/2010–09/30/2011 to process the claim.

If the discharge date of the patient is not within an effective date range for any installed grouper, or if the discharge date is missing, the program defaults to the most current version installed. In that case, this message is displayed on the output report:

```
MS-DRG Grouper version xx.xx (October 1, 201x) USED BY DEFAULT.
```

Note: Because of the retroactivity in the Medicare Code Editor a discharge date is needed to elicit edits. If there is no discharge date entered, the Medicare Code Editor will not be called.

Steps for entering data

Follow these steps for interactive data entry:

1. From the Start menu, select All Programs > MSG MCE SOFTWARE I10 > MSGMCE Interactive.

   The About box window appears briefly followed by the data entry (or input) window titled, MS Grouper with Medicare Code Editor Software Vxx.x.

   The data entry window is organized into three sections:

   - Patient Information
   - Patient Stay Information
   - Codes

   The cursor will be positioned at the first field. To enter data, you can tab to move through fields. Use Shift+Tab to move back to the previous field. When in the codes table, text will appear below the code tables displaying the location of the cursor.

Figure 1: Data entry window

2. Enter data into the appropriate fields.

If you need assistance when working on the data entry window, the following table contains information to help you.

Table 5.   Help for interactive data entry

What do you want to do?	Help
Find specific data entry field information	See the "Data entry fields" table (page 20).
Work with text on the window	Use standard Windows options (e.g., cut, copy, paste).
Make a menu selection	See the "Data entry menu items" table (page 81).
Correct an entry in the patient information or patient stay information section	Simply highlight and overwrite the entry with the correct information.
Delete a code entry row in the codes section	For the Admit Dx, tab to the field and use the backspace key to delete the content. For other codes, tab to the field (or use the up/down arrow key), then press Delete to remove the entry. For more information, see the Diagnoses and Procedures field descriptions in the "Data entry fields" table; also see the "Data entry menu items" table, and the "Data entry command buttons" table for additional information on the Delete and Clear functions.
View a long field description or edit message associated with a code	Column can be re-sized.
Eliminate an error message	Select OK to close the dialog box and correct the problem. See the "Interactive error messages" table (page 28) for a list of error messages that can occur, with their descriptions.

3. When you have completed data entry for a record, select Report to view the processed record.

    You can select Report by clicking on it or by tabbing to it and then pressing Enter. Pressing Alt+R also opens the report.

    "Viewing interactive output" (page 32) contains output information, including printing of the report. An example of an output report is shown in the "Program output" section (page 29).

Data entry fields

The following tables describe the fields on the data entry window. An asterisk (*) indicates a required field.

Table 6. **Data entry fields - patient information**

Field name	Length	Description
Name	31	Name of the patient. Alphanumeric. First and last names can be entered in any order.
Medical record number	13	Patient's medical record number. Alphanumeric.
Birth date	10	Birth date of the patient. Format: mm/dd/yy, mm/dd/yyyy, mmddyyyy, or mmddyy. A dash (-), slash (/), or period is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. If the patient is more than 99 years of age, a four-digit year is required. A birth date prior to 01/01/1895 cannot be entered. The birth and admit dates are used to calculate the age of the patient; calculated age overrides entered age.
Age in years*	3	Age of the patient. Valid values: 0–124 years. Age can be an entered or a calculated value. Calculated age (admit date minus birth date) takes precedence over entered age. For more information, see the Birth date field description.
Sex*	1	Patient gender. Select a value from the drop-down list: 0, u, U = Unknown 1, m. M = Male 2, f, F = Female

Table 7. **Data entry fields - patient stay information**

Field name	Length	Description
Account number	17	Patient account number. Alphanumeric.
Primary payer	2	Primary payer for the service provided. Select a value from the drop-down list: 01: Medicare (default) 02: Medicaid 03: Title V 04: Other Govt 05: Work Comp 06: Blue Cross 07: Insur Co 08: Self Pay 09: Other 10: No Charge
Admit date	10	Date of admission to the facility. Format: mm/dd/yy, mm/dd/yyyy, mmddyyyy, or mmddyy. A dash (-), slash (/), or period is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. An admit date prior to 01/01/1895 cannot be entered. The birth and admit dates are used to calculate the age of the patient; for more information, see the Birth date field description. The admit and discharge dates are used to calculate length of stay (LOS); calculated LOS overrides entered LOS. Calculated LOS must be in the range of 00000 to 45291 days.

Field name	Length	Description
Discharge date	10	Date of discharge from the facility. Format: mm/dd/yy, mm/dd/yyyy, mmddyyyy, or mmddyy. A dash (-), slash (/), or period is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. A discharge date prior to 01/01/1895 cannot be entered. The discharge date determines the grouper version called to process the record. The discharge date also determines which discharge status codes are displayed. For this reason, we recommend entering the discharge date before discharge status. If there are no groupers available for the discharge date entered, the product automatically defaults to the latest grouper version available and the output report includes a USED BY DEFAULT notation *(see also Discharge status, below)*. The discharge and admit dates are used to calculate LOS; for more information, see the Admit date field description.
Discharge status*	2	Status of discharge. Enter the discharge date before entering the discharge status so that the appropriate discharge status codes are displayed in a drop-down list *(see also Discharge date, above)*. When a discharge status is selected first, and is invalid for a discharge date entered, the Discharge Status selection is cleared. All available discharge status codes are listed below. 01 = Home or self-care 02 = Disch/trans to another short term hosp 03 = Disch/trans to SNF 04 = Disch/trans to ICF (valid until 09/30/09) 04 = Custodial/supportive care (revised 10/01/09) 05 = Disch/trans to another type of facility (valid until 03/31/08) 05 = Disch/trans to a designated cancer center or children's hospital (revised 04/01/08) 06 = Care of home health service 07 = Left against medical advice

Field name	Length	Description
		08 = Home IV service (valid until 09/30/2005)
		20 = Died
		21 = Disch/trans to court/law enforcement (added 10/01/09)
		30 = Still a patient
		43 = Fed hospital (added 10/01/03)
		50 = Hospice-home
		51 = Hospice-medical facility
		61 = Swing Bed (added 10/01/2001)
		62 = Rehab fac/unit (added 10/01/2001)
		63 = LTC hospital (added 10/01/2001)
		64 = Nursing facility–Medicaid certified (added 10/01/02)
		65 = Psych hosp/unit (added 10/01/03)
		66 = Critical access hospital (added 10/01/05)
		69 = Designated Disaster Alternative Care Site (added 10/01/13)
		70 = Disch/trans to another type of health care institution not defined elsewhere in the code list (added 04/01/08)
		71 = OP services-other facility (10/01/01–09/30/03 only)
		72 = OP services-this facility (10/01/01–09/30/03 only)
		81 = Home-Self care w Planned Readmission (added 10/01/13)
		82 = Short Term Hospital w Planned Readmission (added 10/01/13)

Field name	Length	Description
		83 = SNF w Planned Readmission (added 10/01/13)
		84 = Cust/supp care w Planned Readmission (added 10/01/13)
		85 = Canc/child hosp w Planned Readmission (added 10/01/13)
		86 = Home Health Service w Planned Readmission (added 10/01/13)
		87 = Court/law enfrc w Planned Readmission (added 10/01/13)
		88 = Federal Hospital w Planned Readmission (added 10/01/13)
		89 = Swing Bed w Planned Readmission (added 10/01/13)
		90 = Rehab Facility/ Unit w Planned Readmission (added 10/01/13)
		91 = LTCH w Planned Readmission (added 10/01/13)
		92 = Nursg Fac-Medicaid Cert w Planned Readmiss (added 10/01/13)
		93 = Psych Hosp/Unit w Planned Readmission (added 10/01/13)
		94 = Crit Acc Hosp w Planned Readmission (added 10/01/13)
		95 = Oth Institution w Planned Readmission (added 10/01/13)
LOS (length of stay)	5	Number of days the patient was in the facility. Valid entries: 00000–45291. LOS can be user-entered, or calculated when admit and discharge dates have been entered. For more information, see the Admit date field description.
Optional information	72	Comments or other user-specified information. Alphanumeric.

Table 8.   **Data entry fields - codes**

Field name	Length	Description
Admit Dx*	7	Enter diagnosis codes without decimals. Lower case is automatically converted to upper case. The code description is displayed as you type the code. If the code is not valid, "No description found" displays in the description field. **Note:** The interactive program accepts only diagnosis codes of up to five digits for ICD–9 processing and seven digits for ICD–10 processing.
Apply HAC (hospital-acquired condition) logic	1	The checked box indicates that HAC logic will be applied. By default, this box will always be checked.
Diagnoses: PDX (principal diagnosis)* Diagnoses 2–25	7	Enter diagnosis codes without decimals. Lower case is automatically converted to upper case. The code description and any applicable edits are displayed as you type the code. A maximum of 25 codes can be entered. Pressing the Tab key at the first blank diagnosis code field moves focus to the first blank procedure code field. The Description and Edits fields are display only. A maximum of four edits per code can be displayed. See "Program edits" table (page 37) for a list of code edits. If you enter a secondary diagnosis and later delete it, the program moves up the diagnoses following the deleted row, if there are any, to fill in the empty row. This behavior does not apply to the principal diagnosis. **Note**: The interactive program accepts only diagnosis codes of up to five digits for ICD–9 processing and seven digits for ICD–10 processing.
Present on Admission Indicators	1	Enter one of the following Present on Admission Indicators, required for a diagnosis other than the admit diagnosis: Y = Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission W = Clinically unable to determine if present at the time of admission U = Insufficient documentation to determine if present at the time of admission 1 = Exempt from POA reporting Blank = Exempt from POA reporting

Field name	Length	Description
Procedures: PP (principal procedure) Procedures 2–25	7	Enter procedure codes without decimals. The code description and any applicable edits are displayed as you type the code. A maximum of 25 codes can be entered. Pressing the Tab key at the first blank procedure code field moves focus to the Report button. The Description and Edits fields are display only. A maximum of four edits per code can be displayed. See "Program edits" table (page 39) for a list of code edits. If you enter a procedure and later delete it, the program moves up the procedures following the deleted row, if there are any, to fill in the empty row. **Note:** The interactive program accepts procedure codes of up to four digits for ICD-9 processing and seven digits for ICD-10 processing.

Data entry menu options

The following table describes the menu options on the data entry window. Refer to the Function column to locate the task you want to perform. Accelerator keys allow you to bypass a menu and activate a function more quickly.

Table 9. **Data entry menu items**

Function	Description	Accelerator keys	Menu-based keystrokes
New	Displays the demographics tab cleared of all previously entered information.	Ctrl+N	On Patient menu (Alt + P), select New (key = N)
Exit	Exits the program.	Alt+F4	On Patient menu (Alt + P), select Exit (key = X)
Cut	Removes the selected text and copies it to the clipboard.	Ctrl+X	On Edit menu (Alt + E), select Cut (key = T)
Copy	Copies the selected text to the clipboard.	Ctrl+C	On Edit menu (Alt + E), select Copy (key = C)
Paste	Inserts contents of the clipboard at the insertion point.	Ctrl+V	On Edit menu (Alt + E), select Paste (key = P)

Function	Description	Accelerator keys	Menu-based keystrokes
Delete	Deletes the selected text, or the selected row in the Codes section.	Delete	On Edit menu (Alt + E), select Delete (key = D)
About	Displays the About box with current version information.	n/a	On Help menu (Alt + H), select About (key = A)

Data entry command buttons

The following table describes the command buttons on the data entry window. Use the Function column to locate the task you want to perform.

Table 10.   Data entry command buttons

Button	Function
Clear	Clears all diagnosis (including admit dx) and procedure code entries and their descriptions, and any associated edits.
Report	Displays a pre-formatted output report that can be printed or saved. Alt+R also displays reports.
	An error message displays in place of the report when any required fields are missing or invalid; correct the error, then tab to Report or press Alt+R to open the report again.
	Data output is discussed in "Program output" (page 29).

Interactive error messages

The following table is an alphabetical list of the error messages that can occur during data entry. The messages help prevent invalid or incorrect entries.

Table 11.   Interactive error messages

Message	Description
[Admit date] [Birth date] [Discharge date] is invalid. Dates must be entered in this format: mm/dd/yyyy, mm/dd/yy, mmddyyyy, mmddyy, mm.dd.yyyy, mm.dd.yy, mm-dd-yyyy, or mm-dd-yy.	The value entered for the month, day or year is outside the valid range. See the "Data entry fields" table (page 21) for more information on date fields.
Admit date cannot be after Discharge date.	The program checks for logical sequencing of dates.
Admit date cannot precede 01/01/1895.	A valid date is on or after 01/01/1895.
Admit date cannot precede Birth date.	The program checks for logical sequencing of dates.
Age is invalid. Calculated age must be between 0 and 124 years.	The valid range for age in years is 0–124.
Birth date cannot be after Admit date.	The program checks for logical sequencing of dates.
Birth date cannot be after current date	The program checks for logical sequencing of dates
Birth date cannot be after Discharge date.	The program checks for logical sequencing of dates.
Birth date cannot precede 01/01/1895.	A valid date is on or after 01/01/1895.
Discharge date cannot precede 01/01/1895.	A valid date is on or after 01/01/1895.
Discharge date cannot precede Admit date.	The program checks for logical sequencing of dates.
Discharge date cannot precede Birth date.	The program checks for logical sequencing of dates.

Message	Description
Discharge status invalid for discharge date entered.	When the discharge status is entered before the discharge date, and the discharge status is invalid for the entered discharge date, this message is displayed. To avoid this message, enter the discharge date before selecting a discharge status.
Length of stay (LOS) is invalid. Calculated length of stay must be between 00000 and 45291 days.	The entered or calculated LOS exceeds the upper limit allowed for the field.
The following required fields are missing and/or invalid: Age in years Sex Discharge status Admit Dx PDX	You cannot produce an output report when a required field contains invalid data or is blank. The program sets the focus to the first invalid or blank required field.

Program output

The information in this section describes the output resulting from the processing of the data entered interactively into the program. The output is displayed on your computer screen and can be printed, copied, or saved to a text file.

Reports are saved singly, that is, the program does not append them. If you want a file of multiple reports, you can create one by copying several output reports, one at a time, and pasting them into a text file.

Once data is erased from the data entry window and the Report window closed, the output is no longer available unless you re-enter the data.

This section also contains an illustration of an output report and information on the report fields. Program edits are explained in the following section.

❐ To display the output report, (page) select Report on the data entry window or press Alt+R.

You can select Report by clicking on it or by tabbing to it then pressing Enter.

A sample report is shown in the following figure and contains the following elements:

- A title line giving the version of the grouper that processed the claim.

- Patient information copied from the entries you made on the data entry window.

- Grouper information: the assigned MDC, Final DRG, and Final DRG cost weight.

- Hospital-acquired condition (HAC) status message.

- Clinical information: a listing of the entered diagnosis and procedure codes with their English descriptions.

- Present on Admission (POA) indicators for diagnosis codes, as applicable.

- Edits for diagnosis and procedure codes, as applicable.

- Initial DRG.

```
Title
Line ——————————————  MS-DRG Assignment with Medicare Code Editor vXX.X


Patient ——————        Patient Name: Jane Smith          Medical Record Number: 1234567
Information
                      Admit Date: 10/01/2016   Discharge Date: 10/06/2016        Birth Date: 09/09/1943
                      Optional Information:

                      Patient Account Number: 891011
                      Age in Years: 73              Sex: Female
                      Discharge Status: 01  Home or self-care

Grouping ——————       MDC: 10 ENDOCRINE, NUTRITIONAL & METABOLIC DISEASES & DISORDERS
Information           Final
                      DRG: 638 Diabetes w CC
                      Cost Weight: 00.8382
                      MS-DRG Grouper version 34.0 (October 1, 2016) used.
                      HAC Status: Not Applicable.

                      Admitting Diagnosis:
Clinical ——————       E109     Type 1 diabetes mellitus without complications
Information
                      Principal Diagnosis:
                      E109     Type 1 diabetes mellitus without complications (DRG)
                               POA: Yes, present at the time of inpatient admission

                      Secondary Diagnoses:
POA                   E109     Type 1 diabetes mellitus without complications
Indicator ——————               POA: Yes, present at the time of inpatient admission
                               Edit: Duplicate of principal diagnosis (MCE)
                      N390     Urinary tract infection, site not specified (CC) (DRG)
                               POA: No, not present at the time of inpatient admission
                      I10      Essential (primary) hypertension
                               POA:
                      N469     Male infertility, unspecified
                               POA: Yes, present at the time of inpatient admission
Edit ——————                    Edit: Sex conflict (MCE)


                      Principal Procedure:
                      No principal procedure.

                      Secondary Procedures:
                      No secondary procedures.


                      Initial
                      DRG: 638 Diabetes w CC
                      Primary Payer:    01 Medicare

                      Actual LOS: 5

                      Patient Summary Edits:
                      MCE pre-payment errors only

                                                                                    □
```

Figure 2: Sample output report

Viewing interactive output

Output report fields are described in the "Interactive output report fields" table (page).

Use the menu options described in the "Output report menu options" table. (page)

- Print the output report

- Copy part or all of the report

- Save the report to a file

Exiting the report window

With the output report displayed on your screen:

❐ Select Close (Alt+C) at the bottom of the report window.

The data entry window is re-displayed. You can either

- Edit the data for the current record shown.

   or

- Select Patient > New (Ctrl+N) to begin data entry for a new record.

Output report fields

The following table describes the fields on the output report.

Table 12.   Interactive output report fields

Name	Description
Patient name Medical record number Admit date Discharge date Birth date Optional information Patient account number Age in years Sex Discharge status Primary payer Length of stay (LOS)	These output fields carry over the data entry information. *See the "Data entry fields" table (page 20) for information on these fields.*

Name	Description
Grouping information (MDC, final DRG, final cost weight, grouper version used, HAC status)	The Major Diagnostic Category (MDC) and Final Diagnosis Related Group (DRG) assigned to the record based on the age, sex, discharge status, Hospital Acquired Conditions (HAC), Present on Admission (POA) indicators, and codes entered from the record. The MS-designated DRG cost weight shows under the DRG line. *For a list of DRGs and associated cost weights in the "Current MDCs and DRGs (page 95)".*
	Patient records assigned to DRGs 998 (Principal diagnosis invalid as discharge diagnosis) or 999 (Ungroupable) will not have an assigned valid MDC. In these cases, "MDC: No MDC Assigned" is displayed.
	When DRG 999 is assigned, one of the following messages identifies the reason why the record is ungroupable:
	▪ Invalid principal diagnosis
	▪ Invalid age (<0 or >124)
	▪ Invalid discharge date
	▪ Invalid sex (not 1 or 2)
	▪ Invalid discharge status (batch only)
	▪ Record does not meet criteria for any DRG
	▪ Illogical principal diagnosis (not applicable for ICD-10)
	▪ Diagnosis code cannot be used as principal diagnosis
	▪ POA logic nonexempt - HAC-POA(s) invalid or missing or 1. *Long description: POA logic Indicator = Z AND at least one HAC POA is invalid or missing or 1 *Batch only
	▪ POA logic invalid/missing - HAC-POA(s) are N, U. *Long description: POA logic Indicator is invalid or missing AND at least one HAC POA is N or U *Batch only
	▪ POA logic invalid/missing - HAC-POA(s) invalid/missing or 1. *Long description: POA logic Indicator is invalid or missing AND at least one HAC POA is invalid or missing or 1 *Batch only
	▪ POA logic invalid/missing - multiple distinct HAC-POAs not Y,W. *Long description: POA Logic Indicator is invalid or missing AND there are multiple HACs that have different HAC POA values that are not Y or W *Batch only
	The version of the grouper used for grouping is displayed with the effective date associated with the grouper. If you default to the current grouper version when the discharge date is invalid or missing, see the "Data entry fields" table (page 21) for discharge date information.

Name	Description
Clinical information	Displayed codes include admit diagnosis, principal diagnosis, secondary diagnoses, and procedures. Descriptions follow the codes and, if applicable, the following indicators: **DRG:** Indicates a secondary diagnosis or procedure used to determine DRG assignment. A secondary diagnosis code assigned with HAC and DRG indicates a DRG change with demotion. A procedure code assigned with HAC and DRG indicates code was used for the definition of HAC. **HAC:** Indicates a code flagged as a Hospital Acquired Condition. **MCC:** Indicates a diagnosis code considered to be a major complication or co-morbidity. An MCC diagnosis can significantly influence DRG assignment. When more than one MCC code is present, a DRG indicator replaces the MCC indicator to mark the MCC code used to determine DRG assignment. **CC:** Indicates a diagnosis code considered to be a complication or co-morbidity. A CC diagnosis can significantly influence DRG assignment. When more than one CC code is present, a DRG indicator replaces the CC indicator to mark the CC code used to determine DRG assignment. **OR:** Indicates a procedure code that normally requires use of an operating room and which can significantly influence DRG assignment. When more than one OR code is present, DRG replaces OR to mark the OR code used to assign the DRG. **MCC excluded**: Indicates a diagnosis is a MCC but not considered due to PDX/SDX exclusion. **CC excluded**: Indicates a diagnosis is a CC but not considered due to PDX/SDX exclusion.
Present on Admission (POA) information	Indicates whether the diagnosis was present at the time the patient was admitted.
Edit information	Program edits that indicate a possible coding problem are displayed under the codes that generated them. Each edit includes a Medicare Code Editor notation (MCE). A maximum of four edits per code will be displayed. *See the "Program edits (page 37)" table for a description of each edit and why they occur.*
Initial DRG	Initial Diagnosis Related Group (DRG) assignment prior to Hospital Acquired Condition logic grouper processing.

Name	Description
Patient summary edits	This section is where clinical edits and data entry error messages not pertaining to a specific code are displayed.
	Edits are flagged as pre-payment or post-payment errors, noted as one of the following:
	MCE pre-payment errors only MCE post-payment errors only MCE pre- and post-payment errors No MCE pre- or post-payment errors
	For this flag, edits are categorized as follows:
	Pre-payment
	Age conflict Duplicate of principal diagnosis E-code as principal diagnosis (ICD-9) V, W, X, or Y codes as principal diagnosis (ICD-10) Invalid ICD-9-CM code (ICD-9) Invalid ICD-10-CM code or Invalid ICD-10-PCS code (ICD-10) Manifestation code as principal diagnosis Non-covered procedure Questionable admission Questionable obstetric admission Sex conflict Unacceptable principal diagnosis/Requires secondary diagnosis Invalid age Invalid sex Invalid discharge status Limited coverage Wrong procedure performed Procedure inconsistent with LOS
	Post-payment
	Open biopsy check (discontinued 10/01/2010) Bilateral procedure (ICD-9) Non-specific diagnosis (discontinued 10/01/07) Non-specific O.R. procedure (discontinued 10/01/07) MSP Alert (discontinued 10/01/01)

Output report menu options

The following table describes the menu options on the output report window. Use the Function column to locate the task you want to perform. Accelerator keys allow you to bypass a menu and activate a function more quickly.

Table 13.   Output report menu items

Function	Description	Accelerator key	Menu-based keystrokes
Print	Prints the output report	Ctrl+P	On File menu, (Alt + F), select Print (key = P)
Save As	Opens a Save As dialog box to save the currently displayed output report as a text file. Unless you specified otherwise, the filename will be report.txt and the file will be saved under My Documents folder. You can browse and save the file in any directory you choose. Records cannot be appended in the report.txt file. The file is overwritten each time you save a report unless you specify a different filename. The program asks if you want to overwrite the report.txt file before proceeding with the save.	Ctrl+S	On File menu (Alt + F), select Save As (key = A)
Exit	Closes the output report and re-displays the data entry window	Ctrl+Q	On File menu (Alt + F), select Exit (key = x)
Copy	Copies the selected text to the clipboard	Ctrl+C	On Edit menu (Alt + E), select Copy (key = C)
Select All	Selects the entire output report	Ctrl+A	On Edit menu (Alt + E), choose Select All (key = A)

Output report command button

The following table describes the command button on the output report window. Refer to the Function column to locate the task you want to perform.

Table 14.   Output report command button

Button	Function
Close (Alt+C)	Closes the output report and re-displays the data entry window.

Program edits

The MCE edits in MSG/MCE software are described in this section. The following tables list the edits and where the edit is activated. Edits can appear on the interactive data entry window in the Codes section, and on program output under the codes that generated them.

Table 15.   Program edits - diagnosis codes

Message	Description
Age conflict	Some diagnoses are unlikely for specific ages (e.g., a 5-year old with prostatic hypertrophy). Codes can be assigned to four age categories: Perinatal/Newborn - age of 0 years Pediatric - age 0–17 years inclusive Maternity - age 9–64 years inclusive Adult - age 15–124 years inclusive
Duplicate of principal diagnosis	When the same code is entered as the principal and a secondary diagnosis, this edit appears after the secondary diagnosis code. If the code happens to be on the CC list, the DRG assignment could be affected.
E-code as principal diagnosis	E-codes describe circumstances causing an injury and not the nature of the injury, and should not be used as a principal diagnosis (applicable in ICD-9).
Invalid ICD-9-CM code or Invalid ICD-10-CM code	The code is not in the list of valid codes and is assumed to be invalid or have a missing digit. A record with an invalid principal diagnosis code is assigned to DRG 999, Ungroupable. **Note**: Diagnoses presented as all blank or all zeros are ignored (i.e. are not marked as invalid) except for the principal diagnosis.

Message	Description
Manifestation code as principal diagnosis	A manifestation code describes an underlying disease, not the disease itself, and should not be used as a principal diagnosis.
Secondary payer alert (MSP alert)	Certain trauma-related codes may indicate that another type of liability insurance should be the primary payer rather than Medicare. **Note:** This edit was discontinued on 10/01/2001 and will be displayed in MSG/MCE software versions 16.0–18.0 only.
Non-specific principal diagnosis	Some codes, especially "not otherwise specified" (NOS) codes, are valid but are not suitably specific for a principal diagnosis. This edit applies only if the patient is discharged alive since a more complete diagnostic work-up might not have been possible for a patient who has died. **Note:** This edit was discontinued on 10/01/2007 and will be displayed in MSG/MCE software versions 16.0–24.0 only.
Questionable admission	Some diagnoses are not usually considered sufficient justification for admission to an acute care facility (e.g., benign hypertension).
Sex conflict	Some codes are specific to gender. The edit indicates when such a code indicates a diagnosis (e.g., maternity) inconsistent with the gender of the patient (male).
Unacceptable principal diagnosis	Selected codes describe a circumstance that influences an individual's health status but is not the current injury or illness. These codes should not be used as a principal diagnosis.
Requires secondary diagnosis	However, some codes otherwise considered as unacceptable are accepted if any secondary diagnosis is present. If no secondary diagnosis is present for these codes, the Requires secondary diagnosis message will appear.
V, W, X or Y code as principal diagnosis	V, W, X or Y codes describe circumstances causing an injury and not the nature of the injury, and should not be used as a principal diagnosis (applicable in ICD-10).
Wrong procedure performed	Certain E-codes indicate that the wrong procedure was performed. This edit indicates that one of these E-codes is present.

Table 16. **Program edits - procedure codes**

Message	Description
Bilateral procedure	Codes may not accurately reflect procedures performed on two or more different bilateral joints of the lower extremities during the same admission. The software indicates that the coded bilateral procedure may actually have been two procedures done on a single joint (e.g., a total hip replacement with a partial hip replacement will generate the edit while two total hip replacements will not). (ICD-9 only)
Invalid ICD-9-CM code or Invalid ICD-10-PCS code	The code is not in the list of valid codes and is assumed to be invalid or have a missing digit. **Note**: Procedures presented as all blank or all zeros are ignored (i.e. are not marked as invalid).
Limited coverage	For certain procedures whose medical complexity and serious nature incur extraordinary associated costs, Medicare limits coverage to a portion of the cost. The limited coverage edit is generated on claims containing any of the procedures listed below. Lung volume reduction surgery (LVRS) (ICD-9 only) Lung transplant Combination heart/lung transplant (ICD-9 only) Heart transplant Implantable heart assist system Intest/multi-visceral transplant Liver transplant Kidney transplant Pancreas transplant Artificial heart transplant **Note:** The edit message indicates the type of limited coverage, for ICD-9 only (e.g., Heart transplant-Limited coverage, Lung transplant-Limited coverage, etc.). For ICD-10, the edit message will simply say "Limited coverage."
Non-covered procedure	Some procedures are not covered by Medicare payment.
Non-specific O.R. procedure	Some codes, especially NOS (not otherwise specified) codes, are valid but are not suitably specific. This edit applies only if all coded O.R. procedures are considered non-specific. **Note:** This edit was discontinued on 10/01/2007 and will be displayed in MSG/MCE software versions 16.0–24.0 only.

Message	Description
Open biopsy check (If not open biopsy, code XXXX)	Surgical biopsies are called open biopsies and are relatively infrequent. A different DRG is assigned depending on whether or not the biopsy was open. There are specific ICD-9-CM codes for open and non-open biopsies. The software identifies all open biopsy codes, suggesting an alternate code (XXXX) if the procedure was a closed biopsy. **Note:** This edit was discontinued on 10/01/2010 and will be displayed in MSG/MCE software versions 16.0–27.0 only.
Sex conflict	Some codes are specific to gender. The edit indicates when a procedure code (e.g., prostatectomy) is inconsistent with the gender of the patient (female).
Procedure inconsistent with LOS	The code should only be coded on claims greater than four days.
Questionable obstetric admission	ICD-10-PCS procedure codes describing a cesarean section or vaginal delivery are considered to be a questionable admission except when reported with a corresponding secondary diagnosis code describing the outcome of delivery.

Table 17.   Program edits - invalid

Message	Description
Invalid age[a]	A patient's age is usually necessary for appropriate DRG determination. If the age is not between 0 and 124 years, the age is assumed to be in error.
Invalid sex[a]	A patient's sex is sometimes necessary for appropriate DRG determination. The sex code reported must be either 1 (male) or 2 (female).
Invalid discharge status[a]	A patient's discharge status is sometimes necessary for appropriate DRG determination. Discharge status must be coded according to the UB–04 conventions. For a list of valid entries, see the "Data entry fields" table (page 21).

a. All three invalid edits will be shown as a DRG return code in the batch .up (upload) file.

Chapter 4: Batch processing

The Medicare Severity Grouper with Medicare Code Editor (MSG/MCE) software processes medical record data by two methods:

- Interactively entering one record at a time;

- By batch, processing data from a group of records entered in an MS-DOS file.

This chapter discusses the batch method of claim processing. Batch processing enables you to process many records at a time by entering data into an input file, and then running that file through the grouper. This method uses an MS-DOS environment to run an input file and to produce a file of formatted output reports and/or an upload file.

Sections in this chapter give you information on:

- Steps to run batch processing

- Input and output file formats

- Processing options

- How to work with batch output

- Error messages

- Log files

Steps in batch processing

The following figure is a flow chart that shows the steps in processing records in batch using the MSG/MCE software.
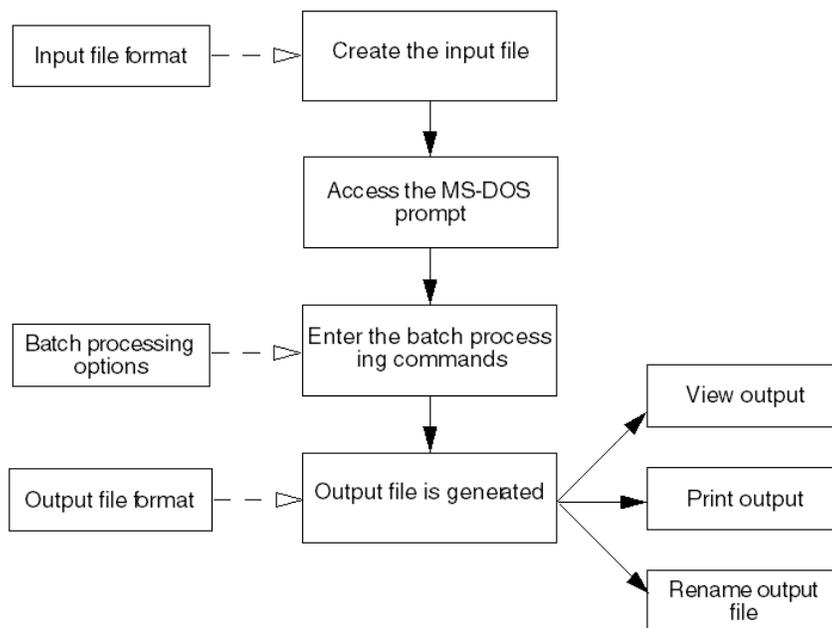
Figure 3: Batch processing overview

Follow these procedural steps to perform batch processing

1. Create the input file.

    See "Input file format" (page 44) for detailed information on formatting the input field information.

2. From the Start menu, select All Programs > MSG MCE SOFTWARE I10 > MS-DOS prompt.

A window with the MS-DOS prompt is displayed.

Note: If you see a message similar to the one below, click Yes to proceed to the MS-DOS prompt with Windows administrator status.
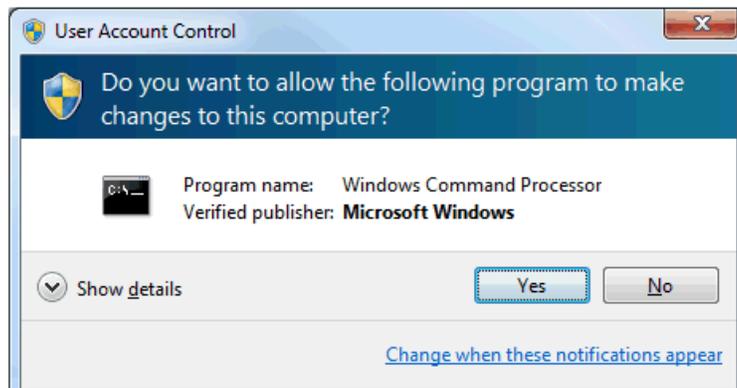
3. At the prompt in the DOS window, type the batch processing command line specifying the input file containing your claim information, the output that you want, then press Enter.

    The command line must contain:

    ■   The executable command mce

    ■   An input filename preceded by the -i identifier

    ■   An output filename preceded by the -o identifier and/or an upload filename preceded by the -u identifier

    See "Command line processing options" (page <u>49</u>) for information on processing options and command lines, including examples.

4. If an error message is displayed on the screen and the program ends, resolve the problem and run the process again.

    See "Batch processing error messages" (page <u>65</u>) for information on error messages that can occur, with their descriptions.

5. View and/or print the output file.

    See "Working with batch output" (page <u>64</u>) for more information, if necessary.

Input file format

The batch input file is a single-line, fixed format consisting of sequential 835 character input records. The following table defines the record layout for this format.

Table 18.   Input file record layout

Field name	Position	Length	Occurrences	Description
Patient name	1	31	1	Patient name. Alphanumeric. Left-justified, blank-filled. All blanks if no value is entered.
Medical record number	32	13	1	Medical record number. Alphanumeric. Left-justified, blank-filled. All blanks if no value is entered.
Account number	45	17	1	Account number. Alphanumeric. Left-justified, blank-filled. All blanks if no value is entered.
Admit date	62	10	1	Admit date. mm/dd/yyyy format. All blanks if no value is entered. Used in age and LOS calculations.
Discharge date	72	10	1	Discharge date. mm/dd/yyyy format. All blanks if no value is entered. Used in LOS calculation.
Discharge status	82	2	1	UB-04 discharge status. Right-justified, zero-filled. Valid values: 01 = Home or self-care 02 = Disch/trans to another short term hosp 03 = Disch/trans to SNF 04 = Disch/trans to ICF (valid until 09/30/09) 04 = Custodial/supportive care (revised 10/01/09) 05 = Disch/trans to another type of facility (valid until 03/31/08) 05 = Canc/child hosp (revised 04/01/08)

Field name	Position	Length	Occurrences	Description
				06 = Care of home health service
				07 = Left against medical advice
				08 = Home IV service (valid until 09/30/05)
				20 = Died
				21 = Disch/trans to court/law enforcement (added 10/01/09)
				30 = Still a patient
				43 = Fed hospital (added 10/01/03)
				50 = Hospice-home
				51 = Hospice-medical facility
				61 = Swing Bed (added 10/01/2001)
				62 = Rehab fac/unit (added 10/01/2001)
				63 = LTC hospital (added 10/01/2001)
				64 = Nursing facility–Medicaid certified (added 10/01/02)
				65 = Psych hosp/unit (added 10/01/03)
				66 = Critical access hospital (added 10/01/05)
				69 = Designated Disaster Alternative Care Site
				70 = Oth institution (added 04/01/08)
				71 = OP services-other facility (10/01/01–09/30/03 only)
				72 = OP services-this facility (10/01/01–09/30/03 only)
				81 = Home-Self care w Planned Readmission
				82 = Short Term Hospital w Planned Readmission
				83 = SNF w Planned Readmission
				84 = Cust/supp care w Planned Readmission
				85 = Canc/child hosp w Planned Readmission
				86 = Home Health Service w Planned Readmission
				87 = Court/law enfrc w Planned Readmission

Field name	Position	Length	Occurrences	Description
				88 = Federal Hospital w Planned Readmission
				89 = Swing Bed w Planned Readmission
				90 = Rehab Facility/ Unit w Planned Readmission
				91 = LTCH w Planned Readmission
				92 = Nursg Fac-Medicaid Cert w Planned Readmiss
				93 = Psych Hosp/Unit w Planned Readmission
				94 = Crit Acc Hosp w Planned Readmission
				95 = Oth Institution w Planned Readmission
Primary payer	84	2	1	Primary pay source. Right-justified, zero-filled. Valid values: 01 = Medicare 02 = Medicaid 03 = Title V 04 = Other Govt 05 = Work Comp 06 = Blue Cross 07 = Insur Co 08 = Self Pay 09 = Other 10 = No Charge
LOS	86	5	1	Length of stay. Right-justified, zero-filled. All blanks if no value is entered. Calculated LOS overrides entered LOS. Valid values=00000 through 45291
Birth date	91	10	1	Birth date. mm/dd/yyyy format. All blanks if no value is entered. Used in age calculation.
Age	101	3	1	Age. Right-justified, zero-filled. All blanks if no value is entered. Valid values: 0–124 years. Calculated age (admit date minus birth date) takes precedence over entered age.

Field name	Position	Length	Occurrences	Description
Sex	104	1	1	Sex. Numeric. Valid values: 0 = Unknown 1 = Male 2 = Female
Admit diagnosis	105	7	1	Admit diagnosis. Left-justified, blank-filled. Diagnosis code without decimal. All blanks if no value is entered. **Note**: Only diagnosis codes of up to five digits are currently recognized as valid for ICD-9 and seven digits for ICD-10. When a code shorter than seven digits is entered, it will be blank filled through the seventh position.
Principal diagnosis	112	8	1	Principal diagnosis. First 7 bytes left-justified, blank-filled without decimals. Eighth byte represents POA indicator. Valid values: Y = Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission W = Clinically unable to determine if present at the time of admission U = Insufficient documentation to determine if present at the time of admission 1 = Exempt from POA reporting Blank = Exempt from POA reporting **Note**: Only diagnosis codes of up to five digits are currently recognized as valid for ICD-9 and seven digits for ICD-10. When a code shorter than seven digits is entered, it will be blank-filled through the seventh position.

Field name	Position	Length	Occurrences	Description
Secondary diagnoses	120	8	24	Diagnoses. First 7 bytes left-justified, blank-filled. Eighth byte represents POA indicator. Up to 24 diagnosis codes without decimals. Valid values: Y = Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission W = Clinically unable to determine if present at the time of admission U = Insufficient documentation to determine if present at the time of admission 1 = Exempt from POA reporting Blank = Exempt from POA reporting **Note**: Only diagnosis codes of up to five digits are currently recognized as valid for ICD-9 and seven digits for ICD-10. When a code shorter than seven digits is entered, it will be blank-filled through the seventh position.
Principal Procedure	312	7	1	Procedure codes. Seven left-justified characters, blank-filled. **Note**: Only procedure codes of up to four digits are currently recognized as valid for ICD-9 and seven digits for ICD-10. When a code shorter than seven digits is entered, it will be blank filled through the seventh position.
Secondary Procedures	319	7	24	Procedure codes. Seven left-justified characters, blank-filled. Up to 24 procedure codes without decimal. **Note**: Only procedure codes of up to four digits are currently recognized as valid for ICD-9 and seven digits for ICD-10. When a code shorter than seven digits is entered, it will be blank filled through the seventh position.

Field name	Position	Length	Occurrences	Description
Procedure date	487	10	25	*For future use.* Procedure dates. The format is mm/dd/yyyy (for future use with POA logic.) All blanks if no value is entered. Up to 25 procedure dates accepted.
Apply HAC logic	737	1	1	Values X or Z to be captured for use with HAC logic. These values reflect whether a hospital requires POA reporting. X = Exempt from POA indicator reporting Z = Requires POA indicator reporting **Note**: If value not X or Z an error code may result.
UNUSED	738	1	1	UNUSED
Optional information	739	72	1	Optional field. Left-justified, blank-filled. All blanks if no value is entered.
Filler	811	25	1	Not used. Blank-filled.

Command line processing options

When processing a batch file, you must include specific options on the command line to tell the program what file to process and what type of output you want. The following table lists the available batch processing options with their descriptions. Examples of command lines follow the table.

When dealing with filenames and/or directories that include spaces, you should quote the entire path including drive specifications, as follows:

```
"C:/Program Files/MsgMce/Production/input file 1.txt"
```

Note: When quoting directory paths that contain backslashes '\', the backslashes need to be doubled as follows:

```
"C:\\Program Files\\MsgMce\\Production\\input file 1.txt"
```

The same rule applies to relative paths. For example, up two directories to Production would be written as follows:

```
"..\\..\\Production\\"
```

Table 19.   Batch processing options

Option	Description
-i	Use with the input filename. Required for all batch runs. The name cannot be the same as the output filename.
-o	Use with the output filename to create a formatted output report. You must enter a filename. The name cannot be the same as the upload filename. If a file already exists with the same name as the one you specify with the -o option, the existing file will be overwritten. The -o option is not required when the -u option is used.
-u	Specifies an single-line upload file without code descriptions. You must enter a filename. The name cannot be the same as the output filename. If a file already exists with the same name as the one you specify with the -u option, the existing file will be overwritten. The -u option is required when there is no -o option.

Command line examples

Examples of batch processing commands are given below.

Example 1

```
msgmce -i <input filename> -o <output filename>
```

Result

Runs the specified input file and creates a formatted output report file.

Example 2

```
msgmce -i <input filename> -u <upload filename>
```

Result

Runs the specified input file and creates a single-line upload file.

Example 3

```
msgmce -i <input filename> -o <output filename> -u <upload filename>
```

Result

Runs the specified input file and creates both a formatted output report file and a single-line upload file.

Output file formats

The output from a batch run is determined by the option(s) you entered on the command line. The following table describes the options.

Table 20.   Batch processing output

Option	Output created
-o	An output file of formatted reports
-u	An upload file of records without code descriptions

Formatted output (-o option)

The file of formatted output reports generated with the -o option is saved where the product was installed. Unless you specified otherwise, this directory is: C:\Program Files\MSG MCE SOFTWARE I10. See the "Program output" section (page 29) for an example of an output report. Note that optional information is displayed in the Optional information field on the output report.

If you name the output file the same for every batch run, the file will be overwritten during each run. To save an output file, rename it after a batch run or specify a different name on the command line. "Renaming a file" (page 65) contains instructions, if you need them.

Upload file (-u option)

The file of records generated with the -u option is saved where the product was installed. Unless you specified otherwise, this directory is: C:\Program Files\MSG MCE SOFTWARE I10.

If you name the upload file the same for every batch run, the file will be overwritten during each run. To save an upload file, rename it after a batch run or specify a different name on the command line. "Renaming a file" (page) contains instructions, if you need them.

The upload file consists of fixed-format, sequential 1905 character output records. The following table defines the upload file record layout.

Note: In previous versions of the software some unused fields had zeros as placeholders. Starting with v26.0, please refer to the manual for field information, as a zero may have a different meaning.

Table 21.   Upload file record layout

Field name	Position	Length	Occur-rences	Description
n/a	001	835	1	Input record
MSG/MCE version used	836	3	1	Version of the software used to process the claim. Right-justified, blank-filled. Stored without decimal point. Valid values: 372, 371, 370, 360, 350, 340, 330, 320, 310, 300, 290, 280, 270, 260, 251, 250, 240, 230, 220, 210, 200, 190, 180, 170, 160.
Initial DRG	839	3	1	Initial diagnosis related group. Right-justified, zero-filled.
Initial M/S indicator	842	1	1	Initial medical/surgical indicator. 0 = DRG return code was not zero 1 = Medical DRG 2 = Surgical DRG
Final MDC	843	2	1	Major diagnostic category. Right-justified, zero-filled.
Final DRG	845	3	1	Final diagnosis related group. Right-justified, zero-filled.
Final M/S indicator	848	1	1	Final medical/surgical indicator. 0 = DRG return code was not zero 1 = Medical DRG 2 = Surgical DRG

Field name	Position	Length	Occur-rences	Description
DRG return code	849	2	1	Numeric. Right-justified, zero-filled. Valid values: 0 = OK, DRG assigned 1 = Diagnosis code cannot be used as PDX 2 = Record does not meet criteria for any DRG 3 = Invalid age 4 = Invalid sex 5 = Invalid discharge status 10 = Illogical PDX (not applicable for ICD-10) 11 = Invalid PDX 12 = POA logic nonexempt - HAC-POA(s) invalid, missing, or 1 (batch only) 13 = POA logic invalid/missing - HAC-POA(s) are N, U (batch only) 14 = POA logic invalid/missing - HAC-POA(s) invalid/missing or 1 (batch only) 18 = POA logic invld/mssng - multiple distinct HAC-POAs not Y,W (batch only) Note: If return code 50- 54, 57 is returned, output blank value.
MSG/MCE edit return code	851	4	1	Four-character return code, right-justified, zero-filled. Valid values: 0000 = MCE - No errors found 0001 = MCE - Pre-payment error 0002 = MCE - Post-payment error 0003 = MCE - Pre- and post-payment errors 0004 = MCE - Invalid discharge date (grouper defaults to current grouper if date out of range for versions in product) *See the "Output report fields (page 32)" table for information on which edits are classified as pre- and post-payment errors.*
Diagnosis code count	855	2	1	Number of diagnosis codes processed. Right-justified, zero-filled. This field does not include the admit diagnosis.

Field name	Position	Length	Occur-rences	Description
Procedure code count	857	2	1	Number of procedure codes processed. Right-justified, zero-filled.
Principal diagnosis edit return flag	859	8	1	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each diagnosis code. Valid values: 00 = Diagnosis not used to assign DRG 01 = Invalid diagnosis code 02 = Sex conflict 03 = Not applicable for principal diagnosis 04 = Age conflict 05 = V, W, X, or Y code as principal diagnosis (ICD-10) E-code as principal diagnosis (ICD-9) 06 = Non-specific principal diagnosis (MCE versions 15.0–23.0 only) 07 = Manifestation code as principal diagnosis 08 = Questionable admission 09 = Unacceptable principal diagnosis 10 = Secondary diagnosis required 11 = Principal diagnosis is its own CC 12 = Diagnosis affected both initial and final DRG assignment 13 = MSP alert (MCE versions 15.0–17.0 only) 14 = Principal diagnosis is its own MCC 15 = Diagnosis affected the final DRG only

Field name	Position	Length	Occur-rences	Description
				16 = Diagnosis affected the initial DRG only
				17 = Diagnosis is a MCC for initial DRG and a Non-CC for final DRG
				18 = Diagnosis is a CC for initial DRG and a Non-CC for final DRG
				19 = Wrong Procedure Performed
				21 = Diagnosis is a CC but not considered due to PDX/SDX exclusion
				23 = Diagnosis is a MCC but not considered due to PDX/SDX exclusion
				99 = Principal diagnosis part of HAC assignment criteria
Principal diagnosis Hospital Acquired Condition assignment criteria #1	867	2	1	Hospital Acquired Condition (HAC) assignment criteria #1 00 = Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition assignment criteria #2	869	2	1	Hospital Acquired Condition (HAC) assignment criteria #2 00 = Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition assignment criteria #3	871	2	1	Hospital Acquired Condition (HAC) assignment criteria #3 00 = Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper

Field name	Position	Length	Occur-rences	Description
Principal diagnosis Hospital Acquired Condition assignment criteria #4	873	2	1	Hospital Acquired Condition (HAC) assignment criteria #4 00= Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition assignment criteria #5	875	2	1	Hospital Acquired Condition (HAC) assignment criteria #5 00 = Criteria to be assigned as a HAC not met 11 = Infection after bariatric surgery Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition usage #1	877	1	1	Hospital Acquired Condition (HAC) usage #1 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition usage #2	878	1	1	Hospital Acquired Condition (HAC) usage #2 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper

Field name	Position	Length	Occur-rences	Description
Principal diagnosis Hospital Acquired Condition usage #3	879	1	1	Hospital Acquired Condition (HAC) usage #3 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition usage #4	880	1	1	Hospital Acquired Condition (HAC) usage #4 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper
Principal diagnosis Hospital Acquired Condition usage #5	881	1	1	Hospital Acquired Condition (HAC) usage #5 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper

Field name	Position	Length	Occur-rences	Description
Secondary diagnosis return flag	882	8	24	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each diagnosis code. These 2-byte flags are a combination of information concerning every diagnosis from the DRG assignment and the editor. **Note**: A maximum of four flags can be returned per diagnosis code. Always display the edit number before the zeros. Valid values: 00 = Diagnosis not used to assign DRG 01 = Invalid diagnosis code 02 = Sex conflict 03 = Duplicate of principal diagnosis 04 = Age conflict 05-10 = Not applicable for secondary diagnoses 11 = Secondary diagnosis is a CC 12 = Diagnosis affected both initial and final DRG assignment 13 = MSP alert (MCE versions 15.0-17.0 only) 14 = Secondary diagnosis is an MCC 15= Diagnosis affected the final DRG only 16 = Diagnosis affected the initial DRG only 17 = Diagnosis is a MCC for initial DRG and a Non-CC for final DRG 18 = Diagnosis is a CC for initial DRG and a Non-CC for final DRG 19 = Wrong procedure performed 21 = Diagnosis is a CC but not considered due to PDX/SDX exclusion 23 = Diagnosis is a MCC but not considered due to PDX/SDX exclusion 99 = Secondary diagnosis is a HAC

Field name	Position	Length	Occur-rences	Description
Secondary diagnosis Hospital Acquired Condition assignment criteria #1 through 5	1074	10	24	Hospital Acquired Condition (HAC) assigned #1-5. These 2-byte flags are a combination of information concerning every diagnosis from the DRG assignment and the editor. **Note**: A maximum of five flags can be returned per diagnosis code. Always display the edit number before the zeros. 00 = Criteria to be assigned as a HAC not met 01 = Foreign object retained after surgery 02 = Air embolism 03 = Blood incompatibility 04 = Pressure ulcers 05 = Falls and trauma 06 = Catheter associated UTI 07 = Vascular catheter-associated infection 08 = Infection after CABG 09 = Manifestations of poor glycemic control 10 = DVT/PE after knee or hip replacement 11 = Infection after bariatric surgery 12 = Infection after certain orthopedic procedures of spine, shoulder, and elbow 13 = Surgical site infection (SSI) following cardiac implantable electronic device (CIED) procedures 14 = Iatrogenic Pneumothorax w/ Venous Catheterization Blank = Diagnosis was not considered by grouper

Field name	Position	Length	Occur-rences	Description
Secondary diagnosis Hospital Acquired Condition usage #1 through 5	1314	5	24	Hospital Acquired Condition (HAC) usage #1-5. This 1-byte flag is a combination of information concerning every diagnosis from the DRG assignment and the editor. **Note**: A maximum of five flags can be returned per diagnosis code. Always display the edit number before the zeros. 0 = HAC not applicable 1 = HAC criteria met 2 = HAC criteria not met 3 = Dx on HAC list, but HAC not applicable due to PDX/SDX exclusion 4 = HAC not applicable, hospital is exempt from POA reporting Blank = Diagnosis was not considered by grouper
Procedure edit return flag*	1434	8	25	Two-byte flag. Right-justified, zero-filled. A maximum of four flags can be returned for each procedure code. These 2-byte flags are a combination of information concerning every procedure from the DRG assignment and the editor. **Note**: A maximum of four flags can be returned per procedure code. Always display the edit number before the zeros. Valid values: 00 = Procedure did not affect DRG assignment 01 = Invalid procedure code 02 = Sex conflict 12* = Procedure affected both initial and final DRG assignment

Field name	Position	Length	Occur-rences	Description
				15* = Procedure affected the final DRG assignment only
				16* = Procedure affected the initial DRG assignment only
				20 = Procedure is an OR procedure
				21 = Non-specific OR procedure (MCE versions 15.0 - 23.0 only)
				22 = Open biopsy check (MCE versions 2.0 - 27.0 only)
				23 = Non-covered procedure
				24 = Bilateral procedure (ICD-9 only)
				30 = Limited coverage (ICD-10 only)
				30 = Lung volume reduction surgery (LVRS) - limited coverage (ICD-9 only)
				31 = Questionable Obstetric Admission (ICD-10 only)
				31 = Lung transplant - limited coverage (ICD-9 only)
				32 = Combo heart/lung transplant - limited coverage (ICD-9 only)
				33 = Heart transplant - limited coverage (ICD-9 only)
				34 = Implantable hrt assist - limited coverage (ICD-9 only)
				35 = Intest/multi-visceral transplant - limited coverage (ICD-9 only)

Field name	Position	Length	Occur-rences	Description
Procedure Hospital Acquired Condition assignment criteria # 1 through 5	1634	10	25	Hospital Acquired Condition (HAC) assignment criteria #1-5. These 2-byte flags are a combination of information concerning every procedure from the DRG assignment and the editor. **Note**: A maximum of five flags can be returned per procedure code. Always display the edit number before the zeros. 00 = Criteria to be assigned as a HAC not met 08 = Infection after CABG 10 = DVT/PE after knee or hip replacement 11 = Infection after bariatric surgery 12 = Infection after certain orthopedic procedures of spine, shoulder, and elbow 13 = Surgical site infection (SSI) following cardiac implantable electronic device (CIED) procedures 14 = Iatrogenic Pneumothorax w/ Venous Catheterization Blank = Procedure not considered by grouper
Initial 4-digit DRG	1884	4	1	Initial 4-digit DRG. Right-justified, zero-filled.
Final 4-digit DRG	1888	4	1	Final 4-digit DRG. Right-justified, zero-filled.
Final DRG CC/MCC usage	1892	1	1	0 = DRG assigned is not based on the presence of CC or MCC 1 = DRG assigned is based on presence of MCC 2 = DRG assigned is based on presence of CC.
Initial DRG CC/MCC Usage	1893	1	1	0 = DRG assigned is not based on the presence of a CC or MCC 1 = DRG assigned is based on presence of MCC 2 = DRG assigned is based on presence of CC

Field name	Position	Length	Occur-rences	Description
Number of Unique Hospital Acquired Conditions Met	1894	2	1	The number of Unique Hospital Acquired Conditions that have been met.
Hospital Acquired Condition Status	1896	1	1	HAC Status 0 – HAC Status: Not Applicable 1 – HAC Status: One or more HAC criteria met; Final DRG does not change 2 – HAC Status: One or more HAC criteria met; Final DRG changes 3 – HAC Status: One or more HAC criteria met; Final DRG changes to ungroupable
Cost Weight	1897	7	1	The DRG cost weight. This 7-byte field is displayed as 2 digits, followed by a decimal point, followed by 4 digits.
newline	1904	2	1	End of record (carriage return/line feed). Not included on last record.

Working with batch output

Output from batch processing can be viewed on your computer screen or printed as hard copy. This section also tells you how to rename a file so you can use the same output filename in the command line and not overwrite the records from a preceding run when you process a new batch of input data.

Viewing output

To view the formatted reports in the output file (using the -o option on the command line):

❐ At the system prompt in the directory where the file was created, enter:

```
type <filename> | more
```

This command displays the contents of the file, one screen at a time. Press the space bar to advance through the file.

Printing output

To print the contents of the output file:

❐ At the system prompt in the directory where the file was created, enter:

```
print  <filename>
```

Renaming a file

To rename an output file

❐ At the system prompt in the directory where the file was created, enter:

```
rename  <old filename>  <new filename>
```

Batch processing error messages

The following table is list of the error messages that can occur during batch processing, and their outcomes.

Note: When a potential for two processing option errors occurs, the process option coupling takes precedence over the process option duplication. Since (-i, -o, and -u) require a filename parameter, the parameter is checked prior to a duplicate process option.

Example: msgmce -i -i inputfile -o outputfile [Error: Invalid option or its value: -i is missing or has an invalid option.]

Example: msgmce -i inputfile -i anotherinput -o outputfile [Error: The processing option (-i) should only be entered once.]

Table 22.   Batch processing error messages

Message	Why it's generated	What happens
Admit date cannot be after discharge date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
Admit date cannot precede 01/01/1895	Occurs when the admit date precedes 01/01/1895	A valid date is on or after 01/01/1895
Admit date cannot precede Birth date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.

Message	Why it's generated	What happens
Admit date is invalid	Any of the month, day, and year entries are not in the valid ranges.	The input record is processed and an error message is written in the log file.
An input file (-i) must be specified	The required -i option is missing.	The message is displayed on the screen and the program ends.
An output file (-o) or upload file (-u) must be specified	At least one of the -o and -u options must be specified.	The message is displayed on the screen and the program ends.
Birth date cannot be after admit date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
Birth date cannot be after current date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
Birth date cannot be after Discharge date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
Birth date cannot precede 01/01/1895	Occurs when the birth date precedes 01/01/1895	A valid date is on or after 01/01/1895
Birth date is invalid	Any of the month, day, and year entries are not in the valid ranges.	The input record is processed and an error message is written in the log file.
Could not initialize run-time environment	Issue with installation.	The message is displayed on the screen and in the log file, and the program ends.
Discharge date cannot precede 01/01/1895	Occurs when the discharge date precedes 01/01/1895	A valid date is on or after 01/01/1895
Discharge date cannot precede Admit date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
Discharge date cannot precede Birth date	The program checks for logical sequencing of dates.	The input record is processed and an error message is written in the log file.
Discharge date is invalid	Any of the month, day, and year entries are not in the valid ranges.	The input record is processed and an error message is written in the log file.

Message	Why it's generated	What happens
Discharge status is invalid	The discharge status field entry is invalid. For a list of valid discharge status values, see "Input file format" (page 44).	The input record is processed and an error message is written in the log file.
Error opening input file: <filename>	The specified input file could not be opened or is missing.	The message is displayed on the screen and in the log file, and the program ends.
Error opening output file: <filename>	The specified output file could not be opened.	The message is displayed on the screen and the program ends.
Error reading input file: <filename>	The specified input file could not be read.	The message is displayed on the screen and in the log file, and the program ends.
Input filename must be different than the output filename	The same name is used for the input and output files located in the same directory.	The message is displayed on the screen and the program ends.
Invalid age	The entered or calculated age is less than 0 or greater than 124.	The input record is processed and an error message is written in the log file.
Invalid length of stay	The entered or calculated LOS is less than 0 or greater than 45291.	The input record is processed and an error message is written in the log file.
Invalid option or its value: <entered value>	An argument was entered without a processing option or a processing option without an argument.	The message is displayed on the screen and the program ends.
Invalid processing option: <entered value>	An option entered on the command line is not valid.	The message is displayed on the screen and the program ends.
Invalid sex	The sex field entry is invalid.	The input record is processed and an error message is written in the log file.
Output filename must be different than the upload filename	The same name is used for the output and upload files located in the same directory.	The message is displayed on the screen and the program ends.
Record number <value>: Invalid line length; record not processed.	A single-line format input record length cannot be more or less than 835 characters.	It skips the record and continues processing and an error message is written in the log file.

Message	Why it's generated	What happens
The processing option <entered value> should only be entered once.	Only one occurrence of each processing option is allowed.	The message is displayed on the screen and the program ends.
You have too many applications open. Close any unnecessary applications that are open.	The system does not have enough memory to run the MSG/MCE application.	The message is displayed on the screen and the program ends.

Log files

The software generates a log file for every batch run and saves it where the product was installed.

By default, the log file is named msgmce.log, and will be located in the <Product install directory> folder, and contains the following information:

- A title line with the name and version number of the product

- Input filename

- Output filename (if specified)

- Upload filename (if specified)

- Run start time

  Date format = mm/dd/yyyy (e.g., 03/18/2014)

- Patient ID: <value> Acct# :<value> followed by error

  This line is repeated for however many error messages occur for the same patient record.

- Run end time

A sample log file is shown in the following figure.

```
MS Grouper with Medicare Code Editor Software vxx.x

Input file: test.in

Output file: test.out

Upload file: test.up

Start time: 05/29/2014 11:28:34

Patient ID 1          : Age is invalid. Calculated age must be between 0 and 124 years.
Patient ID 2          : Birth date cannot be after Discharge date.
Patient ID 2          : Discharge date cannot precede Birth date.
Patient ID 3          : LOS is invalid. Calculated LOS must be between 0 and 45291 days.
Patient ID 4          : Admit date is invalid.


End time: 05/29/2014 11:28:40
```

The log file can be viewed on your computer screen, saved, or printed as hard copy. The file can also be renamed if you want to save it since the log file produced in a batch run overwrites the previous one.

Viewing the file

To display the contents of the log file on your screen

❐   At the system prompt in the directory where the log file was created, enter:

```
type  <filename> | more
```

Printing the file

To print the contents of the log file

❐   At the system prompt in the directory where the log file was created, enter:

```
print  <filename>
```

Renaming the file

To rename a log file

❐   At the system prompt in the directory where the file was created, enter:

```
rename  <old filename>  <new filename>
```

Chapter 5: Accessibility Features

The Medicare Severity Grouper with Medicare Code Editor (MSG/MCE) software can process medical record data interactively entering one record at a time using the accessibility features discussed in this chapter.

Interactive processing enables you to correct invalid data or codes at the time a record is processed. This method uses a Microsoft® Windows® environment to enter data and view the output.

User should have adequate training to use the MSG MCE product. The tab, arrow keys, and enter keys should be utilized to move within the product and when making selections. Prior knowledge of JAWS functionality is required.

Sections in this chapter give you information on:

- System requirements.

- Data entry—including field descriptions, information on menus and command buttons on the data entry window, and error messages.

- Program output, including an example output report and explanation of output fields, information on menus and command buttons on the data output window.

- Descriptions of the edits in the MSG/MCE software program.

System requirements

The following are system requirements for accessibility:

- Windows-based Assistive Technology software

- JAVA® Access Bridge

Note: Assistive Technology software needs to be running prior to using MSG MCE.

Effective with MSG MCE version 31, accessibility users must enable JAVA Access Bridge as follows:

To enable the JAVA Access   Bridge

Note: These steps assume you have already downloaded and installed MSG MCE.

1. Press **WINDOWS Key+R** to open the run dialog box.

2. Type "cmd" and press **ENTER**.

3. Type the following command and press **ENTER** (assuming you have installed MSGMCE to the default location):

   ```
   cd C:\Program Files\MSG MCE SOFTWARE I10\jre\bin
   ```

4. Type "jabswitch -enable" and press **ENTER**.

   A message will be displayed on the next line that tells you that the JAVA Access Bridge is enabled.

5. Type "exit" and press **ENTER** to return to the desktop.

6. Quit and restart JAWS. JAVA applications can now be used with JAWS.

Data entry

This information gives you field information and valid entry ranges where they exist, to assist in data entry. You will be able to navigate through the data entry window and perform functions, such as editing fields or copying text. Error messages that can occur during data entry are listed and explained.

Grouper selection

As you enter data, the program automatically selects the appropriate grouper for processing using the discharge date entered from the patient's medical record. For example, a discharge date of 11/14/2010 will call MS grouper 28 with an effective date range of 10/01/2010–09/30/2011 to process the claim.

If the discharge date of the patient is not within an effective date range for any installed grouper, or if the discharge date is missing, the program defaults to the most current version installed. In that case, this message is displayed on the output report:

```
MS-DRG Grouper version xx.xx (October 1, 201x) USED BY DEFAULT.
```

Note: Because of the retroactivity in the Medicare Code Editor a discharge date is needed to elicit edits. If there is no discharge date entered, the Medicare Code Editor will not be called.

Steps for entering data

Follow these steps for interactive data entry:

1. From the Start menu, select All Programs > MSG MCE SOFTWARE I10> MSG MCE Interactive.

   The About box window appears briefly followed by the data entry (or input) window titled, MS Grouper with Medicare Code Editor Software Vxx.x.

   The data entry window is organized into three sections:

- Patient Information

- Patient Stay Information

- Codes

The cursor will be positioned at the first field. To enter data, tab to move through fields. Use Shift+Tab to move back to the previous field.

2. Enter data into the appropriate fields.

    If you need assistance when working on the data entry window, the following table contains information to help you.

Table 23.   Help for interactive data entry

What do you want to do?	Help
Find specific data entry field information	See the "Data entry fields" table (page 74).
Work with text on the window	Use standard Windows options (e.g., cut, copy, paste).
Make a menu selection	See the "Data entry menu items" table (page 81).
Correct an entry in the patient information or patient stay information section	Tab to the field and use backspace key to delete the content, then enter the correct information.
Delete a code entry row in the codes section	For the Admit Dx, tab to the field and use the backspace key to delete the content. For other codes, tab to the field (or use the up/down arrow key), then press Delete to remove the entry.

For more information, see the Diagnoses and Procedures field descriptions in the "Data entry fields" table (page 79); also see the "Data entry menu items" table (page 81) and the "Data entry command buttons" table (page 82) for additional information on the Delete and Clear functions. |
| Eliminate an error message | Select OK to close the dialog box, and correct the problem. See the "Interactive error messages" table (page 82) for a list of error messages that can occur, with their descriptions. |

3. When you have completed data entry for a record, select Report to view the processed record.

    You can select Report by pressing Alt+R, or by tabbing to the Report button and then pressing Enter.

"Viewing interactive output" (page 86) contains output information, including printing of the report. An example of an output report is shown in the "Program output" section (page 84).

Data entry fields

The following tables describe the fields on the data entry window. An asterisk indicates a required field.

Table 24.   Data entry fields - patient information

Field name	Length	Description
Name	31	Name of the patient. Alphanumeric. First and last names can be entered in any order.
Medical record number	13	Patient's medical record number. Alphanumeric.
Birth date	10	Birth date of the patient. Format: mm/dd/yy, mm/dd/yyyy, mmddyyyy, or mmddyy. A dash (-), slash (/), or period is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. If the patient is more than 99 years of age, a four-digit year is required. A birth date prior to 01/01/1895 cannot be entered. The birth and admit dates are used to calculate the age of the patient; calculated age overrides entered age.
Age in years*	3	Age of the patient. Valid values: 0–124 years. Age can be an entered or a calculated value. Calculated age (admit date minus birth date) takes precedence over entered age. For more information, see the Birth date field description.
Sex*	1	Patient gender. Select a value from the drop-down list: 0, u, U = Unknown 1, m. M = Male 2, f, F = Female

Table 25.   **Data entry fields - patient stay information**

Field name	Length	Description
Account number	17	Patient account number. Alphanumeric.
Primary payer	2	Primary payer for the service provided. Select a value from the drop-down list: 01: Medicare (default) 02: Medicaid 03: Title V 04: Other Govt 05: Work Comp 06: Blue Cross 07: Insur Co 08: Self Pay 09: Other 10: No Charge
Admit date	10	Date of admission to the facility. Format: mm/dd/yy, mm/dd/yyyy, mmddyyyy, or mmddyy. A dash (-), slash (/), or period is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. An admit date prior to 01/01/1895 cannot be entered. The birth and admit dates are used to calculate the age of the patient; *for more information, see the Birth date field description*. The admit and discharge dates are used to calculate length of stay (LOS); calculated LOS overrides entered LOS. Calculated LOS must be in the range 00000 to 45291 days.

Field name	Length	Description
Discharge date	10	Date of discharge from the facility. Format: mm/dd/yy, mm/dd/yyyy, mmddyyyy, or mmddyy.
		A dash (-), slash (/), or period is accepted to separate any digit from 0–9. The program automatically converts a two-digit year to a four-digit display. A discharge date prior to 01/01/1895 cannot be entered.
		The discharge date determines the grouper version called to process the record. The discharge date also determines which discharge status codes are displayed. For this reason, we recommend entering the discharge date before discharge status. If there are no groupers available for the discharge date entered, the product automatically defaults to the latest grouper version available and the output report includes a USED BY DEFAULT notation *(see also Discharge status)*.
		The discharge and admit dates are used to calculate LOS; *for more information, see the Admit date field description*.

Field name	Length	Description
Discharge status*	2	Status of discharge. Enter the discharge date before entering the discharge status so that the appropriate discharge status codes are displayed in a drop-down list *(see also Discharge date, above)*. An error message (page 82) is displayed when a discharge status is selected first and is invalid for a discharge date entered afterward. All available discharge status codes are listed below. 01 = Home or self-care 02 = Disch/trans to another short term hosp 03 = Disch/trans to SNF 04 = Disch/trans to ICF (valid until 09/30/09) 04 = Custodial/supportive care (revised 10/01/09) 05 = Disch/trans to another type of facility (valid until 03/31/08) 05 = Disch/trans to a designated cancer center or children's hospital (revised 04/01/08) 06 = Care of home health service 07 = Left against medical advice 08 = Home IV service (valid until 09/30/2005) 20 = Died 21 = Disch/trans to court/law enforcement (added 10/01/09) 30 = Still a patient 43 = Fed hospital (added 10/01/03) 50 = Hospice-home 51 = Hospice-medical facility 61 = Swing Bed (added 10/01/2001) 62 = Rehab fac/unit (added 10/01/2001) 63 = LTC hospital (added 10/01/2001) 64 = Nursing facility–Medicaid certified (added 10/01/02) 65 = Psych hosp/unit (added 10/01/03) 66 = Critical access hospital (added 10/01/05) 69 = Designated Disaster Alternative Care Site (added 10/01/13)

Field name	Length	Description
		70 = Disch/trans to another type of health care institution not defined elsewhere in the code list (added 04/01/08)
		71 = OP services-other facility (10/01/01–09/30/03 only)
		72 = OP services-this facility (10/01/01–09/30/03 only)
		81 = Home-Self care w Planned Readmission (added 10/01/13)
		82 = Short Term Hospital w Planned Readmission (added 10/01/13)
		83 = SNF w Planned Readmission (added 10/01/13)
		84 = Cust/supp care w Planned Readmission (added 10/01/13)
		85 = Canc/child hosp w Planned Readmission (added 10/01/13)
		86 = Home Health Service w Planned Readmission (added 10/01/13)
		87 = Court/law enfrc w Planned Readmission (added 10/01/13)
		88 = Federal Hospital w Planned Readmission (added 10/01/13)
		89 = Swing Bed w Planned Readmission (added 10/01/13)
		90 = Rehab Facility/ Unit w Planned Readmission (added 10/01/13)
		91 = LTCH w Planned Readmission (added 10/01/13)
		92 = Nursg Fac-Medicaid Cert w Planned Readmiss (added 10/01/13)
		93 = Psych Hosp/Unit w Planned Readmission (added 10/01/13)
		94 = Crit Acc Hosp w Planned Readmission (added 10/01/13)
		95 = Oth Institution w Planned Readmission (added 10/01/13)
LOS (length of stay)	5	Number of days the patient was in the facility. Valid entries: 00000-45291. LOS can be user-entered, or calculated when admit and discharge dates have been entered. *For more information, see the Admit date field description*.
Optional information	72	Comments or other user-specified information. Alphanumeric.

Table 26.   Data entry fields - codes

Field name	Length	Description
Admit Dx*	5	Enter diagnosis codes without decimals. Lower case is automatically converted to upper case. The code description is displayed as you type the code. If the code is not valid, "No description found" displays in the description field. **Note**: The interactive program accepts only diagnosis codes of up to five digits for ICD–9 processing and seven digits for ICD–10 processing.
Apply HAC (hospital-acquired condition) logic	1	The checked box indicates that HAC logic will be applied. By default, this box will always be checked.
Diagnoses: PDX (principal diagnosis)* Diagnoses 2–25	7	Enter diagnosis codes without decimals. The code description and any applicable edits can be accessed using the right arrow. A maximum of 25 codes can be entered. Pressing the Tab key at the first blank diagnosis code field moves focus to the first blank procedure code field. The Description and Edits fields are display only. A maximum of four edits per code can be displayed. See the "Program edits" table (page 91) for a list of code edits. If you enter a secondary diagnosis and later delete it, the program moves up the diagnoses following the deleted row, if there are any, to fill in the empty row. This behavior does not apply to the principal diagnosis. **Note**: The interactive program accepts only diagnosis codes of up to five digits for ICD–9 processing and seven digits for ICD–10 processing.

Field name	Length	Description
Present on Admission Indicators	1	Enter one of the following Present on Admission Indicators, required for a diagnosis other than the admit diagnosis: Y = Yes, present at the time of inpatient admission N = No, not present at the time of inpatient admission W = Clinically unable to determine if present at the time of admission U = Insufficient documentation to determine if present at the time of admission 1 = Exempt from POA reporting Blank = Exempt from POA reporting **Note**: With JAWS running, if a user enters a secondary diagnosis code and tabs to the POA field and it is blank, if a value has been entered in a previous POA cell, that previous POA value may be read.
Procedures: PP (principal procedure) Procedures 2–25	7	Enter procedure codes without decimals. The code description and any applicable edits can be accessed using the right arrow. A maximum of 25 codes can be entered. Pressing the Tab key at the first blank procedure code field moves focus to the Report button. The Description and Edits fields are display only. A maximum of four edits per code can be displayed. See "Program edits" (page 91) for a list of code edits. If you enter a procedure and later delete it, the program moves up the procedures following the deleted row, if there are any, to fill in the empty row. **Note:** The interactive program accepts procedure codes of up to four digits for ICD-9 processing and seven digits for ICD-10 processing.

Data entry menu options

The following table describes the menu options on the data entry window. Refer to the Function column to locate the task you want to perform. Accelerator keys allow you to bypass a menu and activate a function more quickly.

Table 27.   Data entry menu items

Function	Description	Accelerator keys	Menu-based keystrokes
New	Displays the demographics tab cleared of all previously entered information.	Ctrl+N	On Patient menu (Alt + P), select New (key = N)
Exit	Exits the program.	Alt+F4	On Patient menu (Alt + P), select Exit (key = X)
Cut	Removes the selected text and copies it to the clipboard.	Ctrl+X	On Edit menu (Alt + E), select Cut (key = T)
Copy	Copies the selected text to the clipboard.	Ctrl+C	On Edit menu (Alt + E), select Copy (key = C)
Paste	Inserts contents of the clipboard at the insertion point.	Ctrl+V	On Edit menu (Alt + E), select Paste (key = P)
Delete	Deletes the selected text, or the selected row in the Codes section.	Delete	On Edit menu (Alt + E), select Delete (key = D)
About	Displays the About box with current version information.	n/a	On Help menu (Alt + H), select About (key = A)

Data entry command buttons

The following table describes the command buttons on the data entry window. Refer to the Function column to locate the task you want to perform.

Table 28. **Data entry command buttons**

Button	Function
Clear	Clears all diagnosis (including admit dx) and procedure code entries and their descriptions, and any associated edits.
Report	Displays a pre-formatted output report that can be printed or saved.
	An error message displays in place of the report when any required fields are missing or invalid; correct the error, then do one of the following to open the report: tab to the Report button and press Enter or press Alt+R.
	Data output is discussed in "Program output" (page 84).

Interactive error messages

The following table is an alphabetical list of the error messages that can occur during data entry. The messages help prevent invalid or incorrect entries.

Table 29. **Interactive error messages**

Message	Description
[Admit date] [Birth date] [Discharge date] is invalid. Dates must be entered in this format: mm/dd/yyyy, mm/dd/yy, mmddyyyy, mmddyy, mm.dd.yyyy, mm.dd.yy, mm-dd-yyyy, or mm-dd-yy.	The value entered for the month, day or year is outside the valid range. See the "Data entry fields" table (page 75) for more information on date fields.
Admit date cannot be after Discharge date.	The program checks for logical sequencing of dates.
Admit date cannot precede 01/01/1895.	A valid date is on or after 01/01/1895.
Admit date cannot precede Birth date.	The program checks for logical sequencing of dates.

Message	Description
Age is invalid. Calculated age must be between 0 and 124 years.	The valid range for age in years is 0–124.
Birth date cannot be after Admit date.	The program checks for logical sequencing of dates.
Birth date cannot be after current date.	The program checks for logical sequencing of dates.
Birth date cannot be after Discharge date.	The program checks for logical sequencing of dates.
Birth date cannot precede 01/01/1895.	A valid date is on or after 01/01/1895.
Discharge date cannot precede 01/01/1895.	A valid date is on or after 01/01/1895.
Discharge date cannot precede Admit date.	The program checks for logical sequencing of dates.
Discharge date cannot precede Birth date.	The program checks for logical sequencing of dates.
Discharge status invalid for discharge date entered.	When the discharge status is entered before the discharge date, and the discharge status is invalid for the entered discharge date, this message is displayed. To avoid this message, enter the discharge date before selecting a discharge status.
Length of stay (LOS) is invalid. Calculated length of stay must be between 00000 and 45291 days.	The entered or calculated LOS exceeds the upper limit allowed for the field.
The following required fields are missing and/or invalid: Age in years Sex Discharge status Admit Dx PDX	You cannot produce an output report when a required field contains invalid data or is blank. The program sets the focus to the first invalid or blank required field.

Program output

The information in this section describes the output resulting from the processing of the data entered interactively into the program. The output is displayed on your computer screen and can be printed, copied, or saved to a text file.

Reports are saved singly, that is, the program does not append them. If you want a file of multiple reports, you can create one by copying several output reports, one at a time, and pasting them into a text file.

Once data is erased from the data entry window and the Report window closed, the output is no longer available unless you re-enter the data.

This section also contains an illustration of an output report and information on the report fields. Program edits are explained in the following section.

❒ To display the output report, (page) select Report on the data entry window or press Alt+R.

When the report first opens, you are told the number of lines before the report is read. You can press Alt+C at any time to close the report.

A sample report is shown in the following figure and contains the following elements:

- A title line giving the version of the grouper that processed the claim.

- Patient information copied from the entries you made on the data entry window.

- Grouper information: the assigned MDC, Final DRG, and Final DRG cost weight.

- Hospital-acquired condition (HAC) status message.

- Clinical information: a listing of the entered diagnosis and procedure codes with their English descriptions.

- Present on Admission (POA) indicators for diagnosis codes, as applicable.

- Edits for diagnosis and procedure codes, as applicable.

- Initial DRG.

Title
Line ——————————— MS-DRG Assignment with Medicare Code Editor vXX.X

Patient ———
Information

Patient Name: Jane Smith   Medical Record Number: 1234567

Admit Date: 10/01/2016   Discharge Date: 10/06/2016   Birth Date: 09/09/1943
Optional Information:

Patient Account Number: 891011
Age in Years: 73   Sex: Female
Discharge Status: 01 Home or self-care

Grouping ———
Information

MDC: 10 ENDOCRINE, NUTRITIONAL & METABOLIC DISEASES & DISORDERS
Final
DRG: 638 Diabetes w CC
Cost Weight: 00.8382
MS-DRG Grouper version 34.0 (October 1, 2016) used.
HAC Status: Not Applicable.

Clinical ———
Information

Admitting Diagnosis:
E109   Type 1 diabetes mellitus without complications

Principal Diagnosis:
E109   Type 1 diabetes mellitus without complications (DRG)
              POA: Yes, present at the time of inpatient admission

Secondary Diagnoses:

POA
Indicator

E109   Type 1 diabetes mellitus without complications
              POA: Yes, present at the time of inpatient admission
              Edit: Duplicate of principal diagnosis (MCE)
N390   Urinary tract infection, site not specified (CC) (DRG)
              POA: No, not present at the time of inpatient admission
I10   Essential (primary) hypertension
              POA:
N469   Male infertility, unspecified
              POA: Yes, present at the time of inpatient admission

Edit ———

              Edit: Sex conflict (MCE)

Principal Procedure:
No principal procedure.

Secondary Procedures:
No secondary procedures.

Initial
DRG: 638 Diabetes w CC
Primary Payer: 01 Medicare

Actual LOS: 5

Patient Summary Edits:
MCE pre-payment errors only

□

Figure 4: Sample output report

Viewing interactive output

Output report fields are described in the "Interactive output report fields" table (page).

Use the menu options described in "Output report menu options" table (page):

- Print the output report

- Copy part or all of the report

- Save the report to a file

Exiting the report window

With the output report displayed on your screen:

❒ Select Close (Alt+C) at the bottom of the report window.

The data entry window is re-displayed. You can

- Edit the data for the current record shown

  or

- Select Patient > New (Ctrl+N) to begin data entry for a new record.

Output report fields

The following table describes the fields on the output report.

Table 30.   Interactive output report fields

Name	Description
Patient name Medical record number Admit date Discharge date Birth date Optional information Patient account number Age in years Sex Discharge status Primary payer Length of stay (LOS)	These output fields carry over the data entry information. See the "Data entry fields" table (page) for information on these fields.

Name	Description
Grouping information (MDC, final DRG, final cost weight, grouper version used, HAC status)	The Major Diagnostic Category (MDC) and Final Diagnosis Related Group (DRG) assigned to the record based on the age, sex, discharge status, Hospital Acquired Conditions (HAC), Present on Admission (POA) indicators, and codes entered from the record. The MS-designated DRG cost weight shows under the DRG line. For a list of DRGs and associated cost weights in the "Current MDCs and DRGs (page 95)."

Patient records assigned to DRGs 998 (Principal diagnosis invalid as discharge diagnosis) or 999 (Ungroupable) will not have an assigned valid MDC. In these cases, "MDC: No MDC Assigned" is displayed.

When DRG 999 is assigned, one of the following messages identifies the reason why the record is ungroupable:

- Invalid principal diagnosis

- Invalid age (<0 or >124)

- Invalid discharge date

- Invalid sex (not 1 or 2)

- Invalid discharge status (batch only)

- Record does not meet criteria for any DRG

- Illogical principal diagnosis (not applicable for ICD-10)

- Diagnosis code cannot be used as principal diagnosis

- Invalid principal diagnosis

- POA logic nonexempt - HAC-POA(s) invalid or missing or 1. *Long description: POA logic Indicator = Z AND at least one HAC POA is invalid or missing or 1 *Batch only

- POA logic invalid/missing - HAC-POA(s) are N, U. *Long description: POA logic Indicator is invalid or missing AND at least one HAC POA is N or U *Batch only

- POA logic invalid/missing - HAC-POA(s) invalid/missing or 1. *Long description: POA logic Indicator is invalid or missing AND at least one HAC POA is invalid or missing or 1 *Batch only

- POA logic invalid/missing - multiple distinct HAC-POAs not Y,W. *Long description: POA Logic Indicator is invalid or missing AND there are multiple HACs that have different HAC POA values that are not Y or W *Batch only

The version of the grouper used for grouping is displayed with the effective date associated with the grouper. If you default to the current grouper version when the discharge date is invalid or missing (page 75), the output states USED BY DEFAULT.

Name	Description
Clinical information	Displayed codes include admit diagnosis, principal diagnosis, secondary diagnoses, and procedures. Descriptions follow the codes and, if applicable, the following indicators: DRG: Indicates a secondary diagnosis or procedure used to determine DRG assignment. A secondary diagnosis code assigned with HAC and DRG indicates a DRG change with demotion. A procedure code assigned with HAC and DRG indicates code was used for the definition of HAC. HAC: Indicates a code flagged as a Hospital Acquired Condition. MCC: Indicates a diagnosis code considered to be a major complication or co-morbidity. An MCC diagnosis can significantly influence DRG assignment. When more than one MCC code is present, a DRG indicator replaces the MCC indicator to mark the MCC code used to determine DRG assignment. CC: Indicates a diagnosis code considered to be a complication or co-morbidity. A CC diagnosis can significantly influence DRG assignment. When more than one CC code is present, a DRG indicator replaces the CC indicator to mark the CC code used to determine DRG assignment. OR: Indicates a procedure code that normally requires use of an operating room and which can significantly influence DRG assignment. When more than one OR code is present, DRG replaces OR to mark the OR code used to assign the DRG. MCC excluded: Indicates a diagnosis is a MCC but not considered due to PDX/SDX exclusion. CC excluded: Indicates a diagnosis is a CC but not considered due to PDX/SDX exclusion.
Present on Admission (POA) information	Indicates whether the diagnosis was present at the time the patient was admitted.
Edit information	Program edits that indicate a possible coding problem are displayed under the codes that generated them. Each edit includes a Medicare Code Editor notation (MCE). A maximum of four edits per code will be displayed. See the "Program edits" tables (pages 91 and 93) for a description of each edit and why they occur.
Initial DRG	Initial Diagnosis Related Group (DRG) assignment prior to Hospital Acquired Condition logic grouper processing.

Name	Description
Patient summary edits	This section is where clinical edits and data entry error messages not pertaining to a specific code are displayed.
	Edits are flagged as pre-payment or post-payment errors, noted as one of the following:
	MCE pre-payment errors only MCE post-payment errors only MCE pre- and post-payment errors No MCE pre- or post-payment errors
	For this flag, edits are categorized as follows:
	Pre-payment
	Age conflict Duplicate of principal diagnosis E-code as principal diagnosis (ICD-9) V, W, X, or Y codes as principal diagnosis (ICD-10) Invalid ICD-9-CM code (ICD-9) Invalid ICD-10-CM code or Invalid ICD-10-PCS code (ICD-10) Manifestation code as principal diagnosis Non-covered procedure Questionable admission Questionable obstetric admission Sex conflict Unacceptable principal diagnosis/Requires secondary diagnosis Invalid age Invalid sex Invalid discharge status Limited coverage Wrong procedure performed Procedure inconsistent with LOS
	Post-payment
	Open biopsy check (discontinued 10/01/2010) Bilateral procedure (ICD-9) Non-specific diagnosis (discontinued 10/01/07) Non-specific O.R. procedure (discontinued 10/01/07) MSP Alert (discontinued 10/01/01)

Output report menu options

The following table describes the menu options on the output report window. Refer to the Function column to locate the task you want to perform. Accelerator keys allow you to bypass a menu and activate a function more quickly.

Table 31.   Output report menu items

Function	Description	Accelerator key	Menu-based keystrokes
Print	Prints the output report	Ctrl+P	On File menu, (Alt + F), select Print (key = P)
Save As	Opens a Save As dialog box to save the currently displayed output report as a text file. Unless you specified otherwise, the filename will be report.txt and the file will be saved under My Documents folder. You can browse and save the file in any directory you choose. Records cannot be appended in the report.txt file. The file is overwritten each time you save a report unless you specify a different filename. The program asks if you want to overwrite the report.txt file before proceeding with the save.	Ctrl+S	On File menu (Alt + F), select Save As (key = A)
Exit	Closes the output report and re-displays the data entry window	Ctrl+Q	On File menu (Alt + F), select Exit (key = x)
Copy	Copies the selected text to the clipboard	Ctrl+C	On Edit menu (Alt + E), select Copy (key = C)
Select All	Selects the entire output report	Ctrl+A	On Edit menu (Alt + E), choose Select All (key = A)

Output report command button

The following table describes the command button on the output report window. Refer to the Function column to locate the task you want to perform.

Table 32.   Output report command button

Button	Function
Close (Alt+C)	Closes the output report and re-displays the data entry window

Program edits

The MCE edits in MSG/MCE software are described in this section. The following tables list the edits and where the edit is activated. Edits can appear on the interactive data entry window in the Codes section, and on program output under the codes that generated them.

Table 33.   Program edits - diagnosis codes

Message	Description
Age conflict	Some diagnoses are unlikely for specific ages (e.g., a 5-year old with prostatic hypertrophy). Codes can be assigned to four age categories: Perinatal/Newborn - age of 0 years Pediatric - age 0–17 years inclusive Maternity - age 9–64 years inclusive Adult - age 15–124 years inclusive
Duplicate of principal diagnosis	When the same code is entered as the principal and a secondary diagnosis, this edit appears after the secondary diagnosis code. If the code happens to be on the CC list, the DRG assignment could be affected.
E-code as principal diagnosis	E-codes describe circumstances causing an injury and not the nature of the injury, and should not be used as a principal diagnosis (applicable in ICD-9).
Invalid ICD-9-CM code or Invalid ICD-10-CM code	The code is not in the list of valid codes and is assumed to be invalid or have a missing digit. A record with an invalid principal diagnosis code is assigned to DRG 999, Ungroupable.
Manifestation code as principal diagnosis	A manifestation code describes an underlying disease, not the disease itself, and should not be used as a principal diagnosis.

Message	Description
Secondary payer alert (MSP alert)	Certain trauma-related codes may indicate that another type of liability insurance should be the primary payer rather than Medicare. **Note:** This edit was discontinued on 10/01/2001 and will be displayed in MSG/MCE software versions 16.0–18.0 only.
Non-specific principal diagnosis	Some codes, especially "not otherwise specified" (NOS) codes, are valid but are not suitably specific for a principal diagnosis. This edit applies only if the patient is discharged alive since a more complete diagnostic work-up might not have been possible for a patient who has died. **Note:** This edit was discontinued on 10/01/2007 and will be displayed in MSG/MCE software versions 16.0–24.0 only.
Questionable admission	Some diagnoses are not usually considered sufficient justification for admission to an acute care facility (e.g., benign hypertension).
Sex conflict	Some codes are specific to gender. The edit indicates when such a code indicates a diagnosis (e.g., maternity) inconsistent with the gender of the patient (male).
Unacceptable principal diagnosis Requires secondary diagnosis	Selected codes describe a circumstance that influences an individual's health status but is not the current injury or illness. These codes should not be used as a principal diagnosis. However, some codes otherwise considered as unacceptable are accepted if any secondary diagnosis is present. If no secondary diagnosis is present for these codes, the Requires secondary diagnosis message will appear.
V, W, X or Y code as principal diagnosis	V, W, X or Y codes describe circumstances causing an injury and not the nature of the injury, and should not be used as a principal diagnosis (applicable in ICD-10).
Wrong procedure performed	Certain E-codes indicate that the wrong procedure was performed. This edit indicates that one of these E-codes is present.

Table 34.   Program edits - procedure codes

Message	Description
Bilateral procedure	Codes may not accurately reflect procedures performed on two or more different bilateral joints of the lower extremities during the same admission. The software indicates that the coded bilateral procedure may actually have been two procedures done on a single joint (e.g., a total hip replacement with a partial hip replacement will generate the edit while two total hip replacements will not). (ICD-9 only)
Invalid ICD-9-CM code or Invalid ICD-10-PCS code	The code is not in the list of valid codes and is assumed to be invalid or have a missing digit.
Limited coverage	For certain procedures whose medical complexity and serious nature incur extraordinary associated costs, Medicare limits coverage to a portion of the cost. The limited coverage edit is generated on claims containing any of the procedures listed below. Lung volume reduction surgery (LVRS) (ICD-9 only) Lung transplant Combination heart/lung transplant (ICD-9 only) Heart transplant Implantable heart assist system Intest/multi-visceral transplant Liver transplant Kidney transplant Pancreas transplant Artificial heart transplant **Note:** The edit message indicates the type of limited coverage, for ICD-9 only (e.g., Heart transplant-Limited coverage, Lung transplant-Limited coverage, etc.). For ICD-10, the edit message will simply say "Limited Coverage."
Non-covered procedure	Some procedures are not covered by Medicare payment.
Non-specific O.R. procedure	Some codes, especially NOS (not otherwise specified) codes, are valid but are not suitably specific. This edit applies only if all coded O.R. procedures are considered non-specific. **Note:** This edit was discontinued on 10/01/2007 and will be displayed in MSG/MCE software versions 16.0–24.0 only.

Message	Description
Open biopsy check (If not open biopsy, code XXXX)	Surgical biopsies are called open biopsies and are relatively infrequent. A different DRG is assigned depending on whether or not the biopsy was open. There are specific ICD-9-CM codes for open and non-open biopsies. The software identifies all open biopsy codes, suggesting an alternate code (XXXX) if the procedure was a closed biopsy. **Note:** This edit was discontinued on 10/01/2010 and will be displayed in MSG/MCE software versions 16.0–27.0 only.
Sex conflict	Some codes are specific to gender. The edit indicates when a procedure code (e.g., prostatectomy) is inconsistent with the gender of the patient (female).
Procedure inconsistent with LOS	The code should only be coded on claims greater than four days.

Table 35.   Program edits - invalid

Message	Description
Invalid age[a]	A patient's age is usually necessary for appropriate DRG determination. If the age is not between 0 and 124 years, the age is assumed to be in error.
Invalid sex[a]	A patient's sex is sometimes necessary for appropriate DRG determination. The sex code reported must be either 1 (male) or 2 (female).
Invalid discharge status[a]	A patient's discharge status is sometimes necessary for appropriate DRG determination. Discharge status must be coded according to the UB–04 conventions. For a list of valid entries, *see the "Data entry fields" table* (page 75).

a. All three invalid edits will be shown as a DRG return code in the batch .up (upload) file.

Appendix A: Current MDCs and DRGs

The following table lists the Major Diagnostic Categories (MDCs) for version 37.2 of the Medicare Severity (MS) grouper. The following tables list the Diagnosis Related Groups (DRGs) for version 37.2 of the grouper and their CMS-designated cost weights. The DRG cost weight is shown on the software output report (page).

Table 36. **List of MDCs**

MDC	Description
01	Diseases & Disorders of the Nervous System
02	Diseases & Disorders of the Eye
03	Diseases & Disorders of the Ear, Nose, Mouth & Throat
04	Diseases & Disorders of the Respiratory System
05	Diseases & Disorders of the Circulatory System
06	Diseases & Disorders of the Digestive System
07	Diseases & Disorders of the Hepatobiliary System & Pancreas
08	Diseases & Disorders of the Musculoskeletal System & Connective Tissue
09	Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast
10	Endocrine, Nutritional & Metabolic Diseases & Disorders
11	Diseases & Disorders of the Kidney & Urinary Tract
12	Diseases & Disorders of the Male Reproductive System
13	Diseases & Disorders of the Female Reproductive System
14	Pregnancy, Childbirth & the Puerperium
15	Newborns & Other Neonates with Conditions Originating in Perinatal Period
16	Diseases & Disorders of Blood, Blood Forming Organs, Immunologic Disorders
17	Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasms
18	Infectious & Parasitic Diseases, Systemic or Unspecified Sites
19	Mental Diseases & Disorders
20	Alcohol/Drug Use & Alcohol/Drug Induced Organic Mental Disorders
21	Injuries, Poisonings & Toxic Effects of Drugs
22	Burns

MDC	Description
23	Factors Influencing Health Status & Other Contacts with Health Services
24	Multiple Significant Trauma
25	Human Immunodeficiency Virus Infections

List of DRGs with cost weights

Table 37.   List of DRGs with cost weights

DRG, MDC, and DRG description	DRG cost weight
001,MDC P,Heart transplant or implant of heart assist system w MCC	27.6339
002,MDC P,Heart transplant or implant of heart assist system w/o MCC	14.0137
003,MDC P,ECMO or trach w MV >96 hrs or PDX exc face, mouth & neck w maj O.R.	18.9539
004,MDC P,Trach w MV >96 hrs or PDX exc face, mouth & neck w/o maj O.R.	11.5438
005,MDC P,Liver transplant w MCC or intestinal transplant	10.3127
006,MDC P,Liver transplant w/o MCC	4.8719
007,MDC P,Lung transplant	10.7863
008,MDC P,Simultaneous pancreas/kidney transplant	5.6161
010,MDC P,Pancreas transplant	3.9761
011,MDC P,Tracheostomy for face, mouth & neck diagnoses or laryngectomy w MCC	4.9438
012,MDC P,Tracheostomy for face, mouth & neck diagnoses or laryngectomy w CC	3.7740
013,MDC P,Tracheostomy for face, mouth & neck diagnoses or laryngectomy w/o CC/MCC	2.4253
014,MDC P,Allogeneic bone marrow transplant	12.7548
016,MDC P,Autologous bone marrow transplant w CC/MCC or T-cell immunotherapy	6.8852
017,MDC P,Autologous bone marrow transplant w/o CC/MCC	4.4474
020,MDC 01P,Intracranial vascular procedures w PDX hemorrhage w MCC	10.8210
021,MDC 01P,Intracranial vascular procedures w PDX hemorrhage w CC	8.2737
022,MDC 01P,Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC	4.9318
023,MDC 01P,Craniotomy w major device implant or acute complex CNS PDX w MCC or chemotherapy implant or epilepsy w neurostimulator	5.6171
024,MDC 01P,Cranio w major dev impl/acute complex CNS PDX w/o MCC	4.0165

DRG, MDC, and DRG description	DRG cost weight
025,MDC 01P,Craniotomy & endovascular intracranial procedures w MCC	4.3945
026,MDC 01P,Craniotomy & endovascular intracranial procedures w CC	3.0458
027,MDC 01P,Craniotomy & endovascular intracranial procedures w/o CC/MCC	2.3967
028,MDC 01P,Spinal procedures w MCC	5.5904
029,MDC 01P,Spinal procedures w CC or spinal neurostimulators	3.2070
030,MDC 01P,Spinal procedures w/o CC/MCC	2.2721
031,MDC 01P,Ventricular shunt procedures w MCC	4.3745
032,MDC 01P,Ventricular shunt procedures w CC	2.1921
033,MDC 01P,Ventricular shunt procedures w/o CC/MCC	1.7009
034,MDC 01P,Carotid artery stent procedure w MCC	3.7537
035,MDC 01P,Carotid artery stent procedure w CC	2.3022
036,MDC 01P,Carotid artery stent procedure w/o CC/MCC	1.7510
037,MDC 01P,Extracranial procedures w MCC	3.2433
038,MDC 01P,Extracranial procedures w CC	1.6752
039,MDC 01P,Extracranial procedures w/o CC/MCC	1.1313
040,MDC 01P,Periph/cranial nerve & other nerv syst proc w MCC	3.9404
041,MDC 01P,Periph/cranial nerve & other nerv syst proc w CC or periph neurostim	2.3715
042,MDC 01P,Periph/cranial nerve & other nerv syst proc w/o CC/MCC	1.8483
052,MDC 01M,Spinal disorders & injuries w CC/MCC	1.6289
053,MDC 01M,Spinal disorders & injuries w/o CC/MCC	0.9661
054,MDC 01M,Nervous system neoplasms w MCC	1.3401
055,MDC 01M,Nervous system neoplasms w/o MCC	0.9860
056,MDC 01M,Degenerative nervous system disorders w MCC	2.1924
057,MDC 01M,Degenerative nervous system disorders w/o MCC	1.2108
058,MDC 01M,Multiple sclerosis & cerebellar ataxia w MCC	1.9547
059,MDC 01M,Multiple sclerosis & cerebellar ataxia w CC	1.0905
060,MDC 01M,Multiple sclerosis & cerebellar ataxia w/o CC/MCC	0.8817
061,MDC 01M,Ischemic stroke, precerebral occlusion or transient ischemia w thrombolytic agent w MCC	2.7935

DRG, MDC, and DRG description	DRG cost weight
062,MDC 01M,Ischemic stroke, precerebral occlusion or transient ischemia w thrombolytic agent w CC	2.0112
063,MDC 01M,Ischemic stroke, precerebral occlusion or transient ischemia w thrombolytic agent w/o CC/MCC	1.6808
064,MDC 01M,Intracranial hemorrhage or cerebral infarction w MCC	1.8748
065,MDC 01M,Intracranial hemorrhage or cerebral infarction w CC or tPA in 24 hrs	1.0277
066,MDC 01M,Intracranial hemorrhage or cerebral infarction w/o CC/MCC	0.7170
067,MDC 01M,Nonspecific cva & precerebral occlusion w/o infarct w MCC	1.4645
068,MDC 01M,Nonspecific cva & precerebral occlusion w/o infarct w/o MCC	0.9034
069,MDC 01M,Transient ischemia w/o thrombolytic	0.7803
070,MDC 01M,Nonspecific cerebrovascular disorders w MCC	1.6729
071,MDC 01M,Nonspecific cerebrovascular disorders w CC	0.9947
072,MDC 01M,Nonspecific cerebrovascular disorders w/o CC/MCC	0.7385
073,MDC 01M,Cranial & peripheral nerve disorders w MCC	1.4156
074,MDC 01M,Cranial & peripheral nerve disorders w/o MCC	0.9881
075,MDC 01M,Viral meningitis w CC/MCC	1.6082
076,MDC 01M,Viral meningitis w/o CC/MCC	0.9025
077,MDC 01M,Hypertensive encephalopathy w MCC	1.5425
078,MDC 01M,Hypertensive encephalopathy w CC	0.9620
079,MDC 01M,Hypertensive encephalopathy w/o CC/MCC	0.7411
080,MDC 01M,Nontraumatic stupor & coma w MCC	1.9163
081,MDC 01M,Nontraumatic stupor & coma w/o MCC	0.8791
082,MDC 01M,Traumatic stupor & coma, coma >1 hr w MCC	2.2518
083,MDC 01M,Traumatic stupor & coma, coma >1 hr w CC	1.3107
084,MDC 01M,Traumatic stupor & coma, coma >1 hr w/o CC/MCC	0.8973
085,MDC 01M,Traumatic stupor & coma, coma <1 hr w MCC	2.2458
086,MDC 01M,Traumatic stupor & coma, coma <1 hr w CC	1.2378
087,MDC 01M,Traumatic stupor & coma, coma <1 hr w/o CC/MCC	0.8392
088,MDC 01M,Concussion w MCC	1.3891

DRG, MDC, and DRG description	DRG cost weight
089,MDC 01M,Concussion w CC	0.9863
090,MDC 01M,Concussion w/o CC/MCC	0.8483
091,MDC 01M,Other disorders of nervous system w MCC	1.5651
092,MDC 01M,Other disorders of nervous system w CC	0.9661
093,MDC 01M,Other disorders of nervous system w/o CC/MCC	0.7612
094,MDC 01M,Bacterial & tuberculous infections of nervous system w MCC	3.5848
095,MDC 01M,Bacterial & tuberculous infections of nervous system w CC	2.4071
096,MDC 01M,Bacterial & tuberculous infections of nervous system w/o CC/MCC	2.2621
097,MDC 01M,Non-bacterial infect of nervous sys exc viral meningitis w MCC	3.5759
098,MDC 01M,Non-bacterial infect of nervous sys exc viral meningitis w CC	1.9550
099,MDC 01M,Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC	1.2824
100,MDC 01M,Seizures w MCC	1.8202
101,MDC 01M,Seizures w/o MCC	0.8829
102,MDC 01M,Headaches w MCC	1.1926
103,MDC 01M,Headaches w/o MCC	0.7995
113,MDC 02P,Orbital procedures w CC/MCC	2.1321
114,MDC 02P,Orbital procedures w/o CC/MCC	1.1908
115,MDC 02P,Extraocular procedures except orbit	1.4860
116,MDC 02P,Intraocular procedures w CC/MCC	1.8910
117,MDC 02P,Intraocular procedures w/o CC/MCC	1.0967
121,MDC 02M,Acute major eye infections w CC/MCC	1.2678
122,MDC 02M,Acute major eye infections w/o CC/MCC	0.7726
123,MDC 02M,Neurological eye disorders	0.7808
124,MDC 02M,Other disorders of the eye w MCC	1.3894
125,MDC 02M,Other disorders of the eye w/o MCC	0.7894
129,MDC 03P,Major head & neck procedures w CC/MCC or major device	2.2893
130,MDC 03P,Major head & neck procedures w/o CC/MCC	1.4456
131,MDC 03P,Cranial/facial procedures w CC/MCC	2.6893

DRG, MDC, and DRG description	DRG cost weight
132,MDC 03P,Cranial/facial procedures w/o CC/MCC	1.5895
133,MDC 03P,Other ear, nose, mouth & throat O.R. procedures w CC/MCC	2.1469
134,MDC 03P,Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC	1.2091
135,MDC 03P,Sinus & mastoid procedures w CC/MCC	2.2846
136,MDC 03P,Sinus & mastoid procedures w/o CC/MCC	1.1900
137,MDC 03P,Mouth procedures w CC/MCC	1.3333
138,MDC 03P,Mouth procedures w/o CC/MCC	0.8614
139,MDC 03P,Salivary gland procedures	1.2343
146,MDC 03M,Ear, nose, mouth & throat malignancy w MCC	1.9286
147,MDC 03M,Ear, nose, mouth & throat malignancy w CC	1.2409
148,MDC 03M,Ear, nose, mouth & throat malignancy w/o CC/MCC	0.7604
149,MDC 03M,Dysequilibrium	0.7305
150,MDC 03M,Epistaxis w MCC	1.2915
151,MDC 03M,Epistaxis w/o MCC	0.6991
152,MDC 03M,Otitis media & URI w MCC	1.0390
153,MDC 03M,Otitis media & URI w/o MCC	0.7064
154,MDC 03M,Other ear, nose, mouth & throat diagnoses w MCC	1.4370
155,MDC 03M,Other ear, nose, mouth & throat diagnoses w CC	0.9011
156,MDC 03M,Other ear, nose, mouth & throat diagnoses w/o CC/MCC	0.6545
157,MDC 03M,Dental & Oral Diseases w MCC	1.5629
158,MDC 03M,Dental & Oral Diseases w CC	0.8666
159,MDC 03M,Dental & Oral Diseases w/o CC/MCC	0.6729
163,MDC 04P,Major chest procedures w MCC	4.8737
164,MDC 04P,Major chest procedures w CC	2.5316
165,MDC 04P,Major chest procedures w/o CC/MCC	1.8492
166,MDC 04P,Other resp system O.R. procedures w MCC	3.7307
167,MDC 04P,Other resp system O.R. procedures w CC	1.9144
168,MDC 04P,Other resp system O.R. procedures w/o CC/MCC	1.3267
175,MDC 04M,Pulmonary embolism w MCC or acute cor pulmonale	1.4444

DRG, MDC, and DRG description	DRG cost weight
176,MDC 04M,Pulmonary embolism w/o MCC	0.8484
177,MDC 04M,Respiratory infections & inflammations w MCC	1.8912
178,MDC 04M,Respiratory infections & inflammations w CC	1.2433
179,MDC 04M,Respiratory infections & inflammations w/o CC/MCC	0.8661
180,MDC 04M,Respiratory neoplasms w MCC	1.7249
181,MDC 04M,Respiratory neoplasms w CC	1.1520
182,MDC 04M,Respiratory neoplasms w/o CC/MCC	0.8428
183,MDC 04M,Major chest trauma w MCC	1.5092
184,MDC 04M,Major chest trauma w CC	1.0182
185,MDC 04M,Major chest trauma w/o CC/MCC	0.7340
186,MDC 04M,Pleural effusion w MCC	1.5429
187,MDC 04M,Pleural effusion w CC	1.0279
188,MDC 04M,Pleural effusion w/o CC/MCC	0.7309
189,MDC 04M,Pulmonary edema & respiratory failure	1.2157
190,MDC 04M,Chronic obstructive pulmonary disease w MCC	1.1440
191,MDC 04M,Chronic obstructive pulmonary disease w CC	0.8928
192,MDC 04M,Chronic obstructive pulmonary disease w/o CC/MCC	0.7092
193,MDC 04M,Simple pneumonia & pleurisy w MCC	1.3335
194,MDC 04M,Simple pneumonia & pleurisy w CC	0.8886
195,MDC 04M,Simple pneumonia & pleurisy w/o CC/MCC	0.6821
196,MDC 04M,Interstitial lung disease w MCC	1.6754
197,MDC 04M,Interstitial lung disease w CC	1.0215
198,MDC 04M,Interstitial lung disease w/o CC/MCC	0.7550
199,MDC 04M,Pneumothorax w MCC	1.7941
200,MDC 04M,Pneumothorax w CC	1.0821
201,MDC 04M,Pneumothorax w/o CC/MCC	0.7180
202,MDC 04M,Bronchitis & asthma w CC/MCC	0.9480
203,MDC 04M,Bronchitis & asthma w/o CC/MCC	0.6938
204,MDC 04M,Respiratory signs & symptoms	0.8125

DRG, MDC, and DRG description	DRG cost weight
205,MDC 04M,Other respiratory system diagnoses w MCC	1.6342
206,MDC 04M,Other respiratory system diagnoses w/o MCC	0.8725
207,MDC 04M,Respiratory system diagnosis w ventilator support >96 hours	5.7356
208,MDC 04M,Respiratory system diagnosis w ventilator support <=96 hours	2.4841
215,MDC 05P,Other heart assist system implant	12.8861
216,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	10.0424
217,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w card cath w CC	6.6516
218,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	5.4014
219,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	7.8401
220,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	5.3059
221,MDC 05P,Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	4.5962
222,MDC 05P,Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	8.3446
223,MDC 05P,Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	6.0029
224,MDC 05P,Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	7.3962
225,MDC 05P,Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	5.6488
226,MDC 05P,Cardiac defibrillator implant w/o cardiac cath w MCC	6.6877
227,MDC 05P,Cardiac defibrillator implant w/o cardiac cath w/o MCC	5.2292
228,MDC 05P,Other cardiothoracic procedures w MCC	6.2863
229,MDC 05P,Other cardiothoracic procedures w/o MCC	4.1049
231,MDC 05P,Coronary bypass w PTCA w MCC	8.2115
232,MDC 05P,Coronary bypass w PTCA w/o MCC	5.9865
233,MDC 05P,Coronary bypass w cardiac cath w MCC	7.7689
234,MDC 05P,Coronary bypass w cardiac cath w/o MCC	5.2063
235,MDC 05P,Coronary bypass w/o cardiac cath w MCC	5.8846
236,MDC 05P,Coronary bypass w/o cardiac cath w/o MCC	4.0291
239,MDC 05P,Amputation for circ sys disorders exc upper limb & toe w MCC	4.6697
240,MDC 05P,Amputation for circ sys disorders exc upper limb & toe w CC	2.7600

DRG, MDC, and DRG description	DRG cost weight
241,MDC 05P,Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	1.5163
242,MDC 05P,Permanent cardiac pacemaker implant w MCC	3.7111
243,MDC 05P,Permanent cardiac pacemaker implant w CC	2.5294
244,MDC 05P,Permanent cardiac pacemaker implant w/o CC/MCC	2.0754
245,MDC 05P,AICD generator procedures	5.2078
246,MDC 05P,Percutaneous cardiovascular procedures w drug-eluting stent w MCC or 4+ arteries or stents	3.1728
247,MDC 05P,Perc cardiovasc proc w drug-eluting stent w/o MCC	2.0347
248,MDC 05P,Percutaneous cardiovascular procedures w non-drug-eluting stent w MCC or 4+ arteries or stents	3.0965
249,MDC 05P,Perc cardiovasc proc w non-drug-eluting stent w/o MCC	1.9166
250,MDC 05P,Perc cardiovasc proc w/o coronary artery stent w MCC	2.5501
251,MDC 05P,Perc cardiovasc proc w/o coronary artery stent w/o MCC	1.6830
252,MDC 05P,Other vascular procedures w MCC	3.2804
253,MDC 05P,Other vascular procedures w CC	2.6066
254,MDC 05P,Other vascular procedures w/o CC/MCC	1.8201
255,MDC 05P,Upper limb & toe amputation for circ system disorders w MCC	2.6496
256,MDC 05P,Upper limb & toe amputation for circ system disorders w CC	1.7165
257,MDC 05P,Upper limb & toe amputation for circ system disorders w/o CC/MCC	1.1344
258,MDC 05P,Cardiac pacemaker device replacement w MCC	3.0587
259,MDC 05P,Cardiac pacemaker device replacement w/o MCC	2.0826
260,MDC 05P,Cardiac pacemaker revision except device replacement w MCC	3.6996
261,MDC 05P,Cardiac pacemaker revision except device replacement w CC	1.9485
262,MDC 05P,Cardiac pacemaker revision except device replacement w/o CC/MCC	1.6776
263,MDC 05P,Vein ligation & stripping	2.3591
264,MDC 05P,Other circulatory system O.R. procedures	3.2380
265,MDC 05P,AICD lead procedures	3.1213

DRG, MDC, and DRG description	DRG cost weight
266,MDC 05P,Endovascular cardiac valve replacement & supplement procedures w MCC	7.1214
267,MDC 05P,Endovascular cardiac valve replacement & supplement procedures w/o MCC	5.6756
268,MDC 05P,Aortic and heart assist procedures except pulsation balloon w MCC	6.7826
269,MDC 05P,Aortic and heart assist procedures except pulsation balloon w/o MCC	4.2664
270,MDC 05P,Other major cardiovascular procedures w MCC	5.1102
271,MDC 05P,Other major cardiovascular procedures w CC	3.5480
272,MDC 05P,Other major cardiovascular procedures w/o CC/MCC	2.6013
273,MDC 05P,Percutaneous intracardiac procedures w MCC	3.7103
274,MDC 05P,Percutaneous intracardiac procedures w/o MCC	3.1598
280,MDC 05M,Acute myocardial infarction, discharged alive w MCC	1.6309
281,MDC 05M,Acute myocardial infarction, discharged alive w CC	0.9687
282,MDC 05M,Acute myocardial infarction, discharged alive w/o CC/MCC	0.7379
283,MDC 05M,Acute myocardial infarction, expired w MCC	1.7997
284,MDC 05M,Acute myocardial infarction, expired w CC	0.7253
285,MDC 05M,Acute myocardial infarction, expired w/o CC/MCC	0.5178
286,MDC 05M,Circulatory disorders except AMI, w card cath w MCC	2.1974
287,MDC 05M,Circulatory disorders except AMI, w card cath w/o MCC	1.1522
288,MDC 05M,Acute & subacute endocarditis w MCC	2.6574
289,MDC 05M,Acute & subacute endocarditis w CC	1.6638
290,MDC 05M,Acute & subacute endocarditis w/o CC/MCC	1.0006
291,MDC 05M,Heart failure & shock w MCC	1.3458
292,MDC 05M,Heart failure & shock w CC	0.9055
293,MDC 05M,Heart failure & shock w/o CC/MCC	0.6553
294,MDC 05M,Deep vein thrombophlebitis w CC/MCC	1.2719
295,MDC 05M,Deep vein thrombophlebitis w/o CC/MCC	0.5770
296,MDC 05M,Cardiac arrest, unexplained w MCC	1.5704
297,MDC 05M,Cardiac arrest, unexplained w CC	0.7230

DRG, MDC, and DRG description	DRG cost weight
298,MDC 05M,Cardiac arrest, unexplained w/o CC/MCC	0.5032
299,MDC 05M,Peripheral vascular disorders w MCC	1.4497
300,MDC 05M,Peripheral vascular disorders w CC	1.0276
301,MDC 05M,Peripheral vascular disorders w/o CC/MCC	0.7258
302,MDC 05M,Atherosclerosis w MCC	1.1023
303,MDC 05M,Atherosclerosis w/o MCC	0.6757
304,MDC 05M,Hypertension w MCC	1.0915
305,MDC 05M,Hypertension w/o MCC	0.7315
306,MDC 05M,Cardiac congenital & valvular disorders w MCC	1.4145
307,MDC 05M,Cardiac congenital & valvular disorders w/o MCC	0.8822
308,MDC 05M,Cardiac arrhythmia & conduction disorders w MCC	1.1877
309,MDC 05M,Cardiac arrhythmia & conduction disorders w CC	0.7563
310,MDC 05M,Cardiac arrhythmia & conduction disorders w/o CC/MCC	0.5593
311,MDC 05M,Angina pectoris	0.6850
312,MDC 05M,Syncope & collapse	0.8166
313,MDC 05M,Chest pain	0.7153
314,MDC 05M,Other circulatory system diagnoses w MCC	2.0295
315,MDC 05M,Other circulatory system diagnoses w CC	0.9704
316,MDC 05M,Other circulatory system diagnoses w/o CC/MCC	0.7422
319,MDC 05P,Other endovascular cardiac valve procedures w MCC	4.1007
320,MDC 05P,Other endovascular cardiac valve procedures w/o MCC	2.3477
326,MDC 06P,Stomach, esophageal & duodenal proc w MCC	5.2705
327,MDC 06P,Stomach, esophageal & duodenal proc w CC	2.5729
328,MDC 06P,Stomach, esophageal & duodenal proc w/o CC/MCC	1.5750
329,MDC 06P,Major small & large bowel procedures w MCC	4.9072
330,MDC 06P,Major small & large bowel procedures w CC	2.5268
331,MDC 06P,Major small & large bowel procedures w/o CC/MCC	1.6892
332,MDC 06P,Rectal resection w MCC	3.4919
333,MDC 06P,Rectal resection w CC	2.2632

DRG, MDC, and DRG description	DRG cost weight
334,MDC 06P,Rectal resection w/o CC/MCC	1.5403
335,MDC 06P,Peritoneal adhesiolysis w MCC	4.0451
336,MDC 06P,Peritoneal adhesiolysis w CC	2.2662
337,MDC 06P,Peritoneal adhesiolysis w/o CC/MCC	1.6397
338,MDC 06P,Appendectomy w complicated principal diag w MCC	2.9101
339,MDC 06P,Appendectomy w complicated principal diag w CC	1.7161
340,MDC 06P,Appendectomy w complicated principal diag w/o CC/MCC	1.2375
341,MDC 06P,Appendectomy w/o complicated principal diag w MCC	2.5581
342,MDC 06P,Appendectomy w/o complicated principal diag w CC	1.6103
343,MDC 06P,Appendectomy w/o complicated principal diag w/o CC/MCC	1.1516
344,MDC 06P,Minor small & large bowel procedures w MCC	2.9951
345,MDC 06P,Minor small & large bowel procedures w CC	1.6333
346,MDC 06P,Minor small & large bowel procedures w/o CC/MCC	1.2827
347,MDC 06P,Anal & stomal procedures w MCC	2.6364
348,MDC 06P,Anal & stomal procedures w CC	1.4093
349,MDC 06P,Anal & stomal procedures w/o CC/MCC	0.9809
350,MDC 06P,Inguinal & femoral hernia procedures w MCC	2.4393
351,MDC 06P,Inguinal & femoral hernia procedures w CC	1.4583
352,MDC 06P,Inguinal & femoral hernia procedures w/o CC/MCC	1.0768
353,MDC 06P,Hernia procedures except inguinal & femoral w MCC	2.9669
354,MDC 06P,Hernia procedures except inguinal & femoral w CC	1.7221
355,MDC 06P,Hernia procedures except inguinal & femoral w/o CC/MCC	1.3724
356,MDC 06P,Other digestive system O.R. procedures w MCC	4.0772
357,MDC 06P,Other digestive system O.R. procedures w CC	2.2504
358,MDC 06P,Other digestive system O.R. procedures w/o CC/MCC	1.3717
368,MDC 06M,Major esophageal disorders w MCC	1.9036
369,MDC 06M,Major esophageal disorders w CC	1.0631
370,MDC 06M,Major esophageal disorders w/o CC/MCC	0.7473
371,MDC 06M,Major gastrointestinal disorders & peritoneal infections w MCC	1.7255

DRG, MDC, and DRG description	DRG cost weight
372,MDC 06M,Major gastrointestinal disorders & peritoneal infections w CC	1.0225
373,MDC 06M,Major gastrointestinal disorders & peritoneal infections w/o CC/MCC	0.7418
374,MDC 06M,Digestive malignancy w MCC	1.9975
375,MDC 06M,Digestive malignancy w CC	1.2073
376,MDC 06M,Digestive malignancy w/o CC/MCC	1.0013
377,MDC 06M,G.I. hemorrhage w MCC	1.7699
378,MDC 06M,G.I. hemorrhage w CC	0.9881
379,MDC 06M,G.I. hemorrhage w/o CC/MCC	0.6457
380,MDC 06M,Complicated peptic ulcer w MCC	1.8876
381,MDC 06M,Complicated peptic ulcer w CC	1.0767
382,MDC 06M,Complicated peptic ulcer w/o CC/MCC	0.7914
383,MDC 06M,Uncomplicated peptic ulcer w MCC	1.3263
384,MDC 06M,Uncomplicated peptic ulcer w/o MCC	0.8702
385,MDC 06M,Inflammatory bowel disease w MCC	1.6103
386,MDC 06M,Inflammatory bowel disease w CC	0.9852
387,MDC 06M,Inflammatory bowel disease w/o CC/MCC	0.7007
388,MDC 06M,G.I. obstruction w MCC	1.5251
389,MDC 06M,G.I. obstruction w CC	0.8397
390,MDC 06M,G.I. obstruction w/o CC/MCC	0.5796
391,MDC 06M,Esophagitis, gastroent & misc digest disorders w MCC	1.2350
392,MDC 06M,Esophagitis, gastroent & misc digest disorders w/o MCC	0.7615
393,MDC 06M,Other digestive system diagnoses w MCC	1.6245
394,MDC 06M,Other digestive system diagnoses w CC	0.9381
395,MDC 06M,Other digestive system diagnoses w/o CC/MCC	0.6544
405,MDC 07P,Pancreas, liver & shunt procedures w MCC	5.4272
406,MDC 07P,Pancreas, liver & shunt procedures w CC	2.7909
407,MDC 07P,Pancreas, liver & shunt procedures w/o CC/MCC	2.0863
408,MDC 07P,Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC	3.5636

DRG, MDC, and DRG description	DRG cost weight
409,MDC 07P,Biliary tract proc except only cholecyst w or w/o c.d.e. w CC	2.3938
410,MDC 07P,Biliary tract proc except only cholecyst w or w/o CC/MCC	1.6600
411,MDC 07P,Cholecystectomy w c.d.e. w MCC	3.8304
412,MDC 07P,Cholecystectomy w c.d.e. w CC	2.3770
413,MDC 07P,Cholecystectomy w c.d.e. w/o CC/MCC	1.6173
414,MDC 07P,Cholecystectomy except by laparoscope w/o c.d.e. w MCC	3.4164
415,MDC 07P,Cholecystectomy except by laparoscope w/o c.d.e. w CC	2.0517
416,MDC 07P,Cholecystectomy except by laparoscope w/o c.d.e. w/o CC/MCC	1.3503
417,MDC 07P,Laparoscopic cholecystectomy w/o c.d.e. w MCC	2.4107
418,MDC 07P,Laparoscopic cholecystectomy w/o c.d.e. w CC	1.6689
419,MDC 07P,Laparoscopic cholecystectomy w/o c.d.e. w/o CC/MCC	1.3068
420,MDC 07P,Hepatobiliary diagnostic procedures w MCC	3.4348
421,MDC 07P,Hepatobiliary diagnostic procedures w CC	1.8412
422,MDC 07P,Hepatobiliary diagnostic procedures w/o CC/MCC	1.4045
423,MDC 07P,Other hepatobiliary or pancreas O.R. procedures w MCC	4.2382
424,MDC 07P,Other hepatobiliary or pancreas O.R. procedures w CC	2.2514
425,MDC 07P,Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC	1.4615
432,MDC 07M,Cirrhosis & alcoholic hepatitis w MCC	1.8234
433,MDC 07M,Cirrhosis & alcoholic hepatitis w CC	1.0320
434,MDC 07M,Cirrhosis & alcoholic hepatitis w/o CC/MCC	0.6399
435,MDC 07M,Malignancy of hepatobiliary system or pancreas w MCC	1.6971
436,MDC 07M,Malignancy of hepatobiliary system or pancreas w CC	1.1257
437,MDC 07M,Malignancy of hepatobiliary system or pancreas w/o CC/MCC	0.8779
438,MDC 07M,Disorders of pancreas except malignancy w MCC	1.6383
439,MDC 07M,Disorders of pancreas except malignancy w CC	0.8472
440,MDC 07M,Disorders of pancreas except malignancy w/o CC/MCC	0.6156
441,MDC 07M,Disorders of liver except malig, cirr, alc hepa w MCC	1.8505
442,MDC 07M,Disorders of liver except malig, cirr, alc hepa w CC	0.9334

DRG, MDC, and DRG description	DRG cost weight
443,MDC 07M,Disorders of liver except malig, cirr, alc hepa w/o CC/MCC	0.6803
444,MDC 07M,Disorders of the biliary tract w MCC	1.6261
445,MDC 07M,Disorders of the biliary tract w CC	1.0745
446,MDC 07M,Disorders of the biliary tract w/o CC/MCC	0.8127
453,MDC 08P,Combined anterior/posterior spinal fusion w MCC	9.4070
454,MDC 08P,Combined anterior/posterior spinal fusion w CC	6.1250
455,MDC 08P,Combined anterior/posterior spinal fusion w/o CC/MCC	4.8133
456,MDC 08P,Spinal fus exc cerv w spinal curv/malig/infec or ext fus w MCC	9.0812
457,MDC 08P,Spinal fus exc cerv w spinal curv/malig/infec or ext fus w CC	6.5133
458,MDC 08P,Spinal fus exc cerv w spinal curv/malig/infec or ext fus w/o CC/MCC	4.6939
459,MDC 08P,Spinal fusion except cervical w MCC	6.8520
460,MDC 08P,Spinal fusion except cervical w/o MCC	3.9604
461,MDC 08P,Bilateral or multiple major joint procs of lower extremity w MCC	5.3788
462,MDC 08P,Bilateral or multiple major joint procs of lower extremity w/o MCC	3.1364
463,MDC 08P,Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w MCC	5.2278
464,MDC 08P,Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w CC	2.9527
465,MDC 08P,Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w/o CC/MCC	1.9152
466,MDC 08P,Revision of hip or knee replacement w MCC	5.0991
467,MDC 08P,Revision of hip or knee replacement w CC	3.5121
468,MDC 08P,Revision of hip or knee replacement w/o CC/MCC	2.8121
469,MDC 08P,Major hip and knee joint replacement or reattachment of lower extremity w MCC or total ankle replacement	3.1399
470,MDC 08P,Major hip and knee joint replacement or reattachment of lower extremity w/o MCC	1.9684
471,MDC 08P,Cervical spinal fusion w MCC	4.9944
472,MDC 08P,Cervical spinal fusion w CC	3.0415
473,MDC 08P,Cervical spinal fusion w/o CC/MCC	2.5124
474,MDC 08P,Amputation for musculoskeletal sys & conn tissue dis w MCC	3.8749

DRG, MDC, and DRG description	DRG cost weight
475,MDC 08P,Amputation for musculoskeletal sys & conn tissue dis w CC	2.1010
476,MDC 08P,Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC	1.1647
477,MDC 08P,Biopsies of musculoskeletal system & connective tissue w MCC	3.2553
478,MDC 08P,Biopsies of musculoskeletal system & connective tissue w CC	2.3171
479,MDC 08P,Biopsies of musculoskeletal system & connective tissue w/o CC/MCC	1.7822
480,MDC 08P,Hip & femur procedures except major joint w MCC	3.0185
481,MDC 08P,Hip & femur procedures except major joint w CC	2.0878
482,MDC 08P,Hip & femur procedures except major joint w/o CC/MCC	1.6453
483,MDC 08P,Major joint/limb reattachment procedure of upper extremities	2.3921
485,MDC 08P,Knee procedures w pdx of infection w MCC	3.2790
486,MDC 08P,Knee procedures w pdx of infection w CC	2.1506
487,MDC 08P,Knee procedures w pdx of infection w/o CC/MCC	1.6072
488,MDC 08P,Knee procedures w/o pdx of infection w CC/MCC	1.9692
489,MDC 08P,Knee procedures w/o pdx of infection w/o CC/MCC	1.2590
492,MDC 08P,Lower extrem & humer proc except hip, foot, femur w MCC	3.4453
493,MDC 08P,Lower extrem & humer proc except hip, foot, femur w CC	2.3020
494,MDC 08P,Lower extrem & humer proc except hip, foot, femur w/o CC/MCC	1.8114
495,MDC 08P,Local excision & removal int fix devices exc hip & femur w MCC	3.4326
496,MDC 08P,Local excision & removal int fix devices exc hip & femur w CC	2.0405
497,MDC 08P,Local excision & removal int fix devices exc hip & femur w/o CC/MCC	1.4693
498,MDC 08P,Local excision & removal int fix devices of hip & femur w CC/MCC	2.4481
499,MDC 08P,Local excision & removal int fix devices of hip & femur w/o CC/MCC	1.1509
500,MDC 08P,Soft tissue procedures w MCC	3.0152
501,MDC 08P,Soft tissue procedures w CC	1.6780
502,MDC 08P,Soft tissue procedures w/o CC/MCC	1.3207
503,MDC 08P,Foot procedures w MCC	2.7166
504,MDC 08P,Foot procedures w CC	1.7365

DRG, MDC, and DRG description	DRG cost weight
505,MDC 08P,Foot procedures w/o CC/MCC	1.6815
506,MDC 08P,Major thumb or joint procedures	1.3386
507,MDC 08P,Major shoulder or elbow joint procedures w CC/MCC	2.1000
508,MDC 08P,Major shoulder or elbow joint procedures w/o CC/MCC	1.5584
509,MDC 08P,Arthroscopy	1.3917
510,MDC 08P,Shoulder, elbow or forearm proc, exc major joint proc w MCC	2.7880
511,MDC 08P,Shoulder, elbow or forearm proc, exc major joint proc w CC	1.8842
512,MDC 08P,Shoulder, elbow or forearm proc, exc major joint proc w/o CC/MCC	1.5138
513,MDC 08P,Hand or wrist proc, except major thumb or joint proc w CC/MCC	1.5771
514,MDC 08P,Hand or wrist proc, except major thumb or joint proc w/o CC/MCC	1.0668
515,MDC 08P,Other musculoskelet sys & conn tiss O.R. proc w MCC	3.1540
516,MDC 08P,Other musculoskelet sys & conn tiss O.R. proc w CC	1.9391
517,MDC 08P,Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC	1.4153
518,MDC 08P,Back & neck proc exc spinal fusion w MCC or disc device/neurostim	3.4086
519,MDC 08P,Back & neck proc exc spinal fusion w CC	1.9087
520,MDC 08P,Back & neck proc exc spinal fusion w/o CC/MCC	1.3380
533,MDC 08M,Fractures of femur w MCC	1.4594
534,MDC 08M,Fractures of femur w/o MCC	0.7778
535,MDC 08M,Fractures of hip & pelvis w MCC	1.2271
536,MDC 08M,Fractures of hip & pelvis w/o MCC	0.7585
537,MDC 08M,Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC	0.9109
538,MDC 08M,Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC	0.7210
539,MDC 08M,Osteomyelitis w MCC	1.8852
540,MDC 08M,Osteomyelitis w CC	1.3000
541,MDC 08M,Osteomyelitis w/o CC/MCC	0.9067
542,MDC 08M,Pathological fractures & musculoskelet & conn tiss malig w MCC	1.8248
543,MDC 08M,Pathological fractures & musculoskelet & conn tiss malig w CC	1.0563

DRG, MDC, and DRG description	DRG cost weight
544,MDC 08M,Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC	0.7584
545,MDC 08M,Connective tissue disorders w MCC	2.5280
546,MDC 08M,Connective tissue disorders w CC	1.2034
547,MDC 08M,Connective tissue disorders w/o CC/MCC	0.8101
548,MDC 08M,Septic arthritis w MCC	1.9833
549,MDC 08M,Septic arthritis w CC	1.1931
550,MDC 08M,Septic arthritis w/o CC/MCC	0.8640
551,MDC 08M,Medical back problems w MCC	1.5894
552,MDC 08M,Medical back problems w/o MCC	0.9119
553,MDC 08M,Bone diseases & arthropathies w MCC	1.2855
554,MDC 08M,Bone diseases & arthropathies w/o MCC	0.7872
555,MDC 08M,Signs & symptoms of musculoskeletal system & conn tissue w MCC	1.3153
556,MDC 08M,Signs & symptoms of musculoskeletal system & conn tissue w/o MCC	0.7918
557,MDC 08M,Tendonitis, myositis & bursitis w MCC	1.4582
558,MDC 08M,Tendonitis, myositis & bursitis w/o MCC	0.8614
559,MDC 08M,Aftercare, musculoskeletal system & connective tissue w MCC	1.8018
560,MDC 08M,Aftercare, musculoskeletal system & connective tissue w CC	1.0435
561,MDC 08M,Aftercare, musculoskeletal system & connective tissue w/o CC/MCC	0.7474
562,MDC 08M,Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC	1.3471
563,MDC 08M,Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC	0.8540
564,MDC 08M,Other musculoskeletal sys & connective tissue diagnoses w MCC	1.5120
565,MDC 08M,Other musculoskeletal sys & connective tissue diagnoses w CC	0.9805
566,MDC 08M,Other musculoskeletal sys & connective tissue diagnoses w/o CC/MCC	0.7577
570,MDC 09P,Skin debridement w MCC	2.8732
571,MDC 09P,Skin debridement w CC	1.6723
572,MDC 09P,Skin debridement w/o CC/MCC	1.1217

DRG, MDC, and DRG description	DRG cost weight
573,MDC 09P,Skin graft for skin ulcer or cellulitis w MCC	5.3153
574,MDC 09P,Skin graft for skin ulcer or cellulitis w CC	3.1218
575,MDC 09P,Skin graft for skin ulcer or cellulitis w/o CC/MCC	1.7570
576,MDC 09P,Skin graft exc for skin ulcer or cellulitis w MCC	4.8492
577,MDC 09P,Skin graft exc for skin ulcer or cellulitis w CC	2.4156
578,MDC 09P,Skin graft exc for skin ulcer or cellulitis w/o CC/MCC	1.6274
579,MDC 09P,Other skin, subcut tiss & breast proc w MCC	2.9861
580,MDC 09P,Other skin, subcut tiss & breast proc w CC	1.6087
581,MDC 09P,Other skin, subcut tiss & breast proc w/o CC/MCC	1.2548
582,MDC 09P,Mastectomy for malignancy w CC/MCC	1.5787
583,MDC 09P,Mastectomy for malignancy w/o CC/MCC	1.4614
584,MDC 09P,Breast biopsy, local excision & other breast procedures w CC/MCC	1.8284
585,MDC 09P,Breast biopsy, local excision & other breast procedures w/o CC/MCC	1.6973
592,MDC 09M,Skin ulcers w MCC	1.7843
593,MDC 09M,Skin ulcers w CC	1.1478
594,MDC 09M,Skin ulcers w/o CC/MCC	0.8097
595,MDC 09M,Major skin disorders w MCC	2.0326
596,MDC 09M,Major skin disorders w/o MCC	0.9741
597,MDC 09M,Malignant breast disorders w MCC	1.6929
598,MDC 09M,Malignant breast disorders w CC	1.0886
599,MDC 09M,Malignant breast disorders w/o CC/MCC	0.6954
600,MDC 09M,Non-malignant breast disorders w CC/MCC	0.9592
601,MDC 09M,Non-malignant breast disorders w/o CC/MCC	0.6188
602,MDC 09M,Cellulitis w MCC	1.4298
603,MDC 09M,Cellulitis w/o MCC	0.8435
604,MDC 09M,Trauma to the skin, subcut tiss & breast w MCC	1.4645
605,MDC 09M,Trauma to the skin, subcut tiss & breast w/o MCC	0.8757
606,MDC 09M,Minor skin disorders w MCC	1.4955

DRG, MDC, and DRG description	DRG cost weight
607,MDC 09M,Minor skin disorders w/o MCC	0.8261
614,MDC 10P,Adrenal & pituitary procedures w CC/MCC	2.4333
615,MDC 10P,Adrenal & pituitary procedures w/o CC/MCC	1.4841
616,MDC 10P,Amputat of lower limb for endocrine, nutrit, & metabol dis w MCC	4.0008
617,MDC 10P,Amputat of lower limb for endocrine, nutrit, & metabol dis w CC	2.0513
618,MDC 10P,Amputat of lower limb for endocrine, nutrit, & metabol dis w/o CC/MCC	1.2545
619,MDC 10P,O.R. procedures for obesity w MCC	3.0785
620,MDC 10P,O.R. procedures for obesity w CC	1.7946
621,MDC 10P,O.R. procedures for obesity w/o CC/MCC	1.5720
622,MDC 10P,Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	3.7755
623,MDC 10P,Skin grafts & wound debrid for endoc, nutrit & metab dis w CC	1.9526
624,MDC 10P,Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC	1.1020
625,MDC 10P,Thyroid, parathyroid & thyroglossal procedures w MCC	2.9251
626,MDC 10P,Thyroid, parathyroid & thyroglossal procedures w CC	1.6828
627,MDC 10P,Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC	1.1417
628,MDC 10P,Other endocrine, nutrit & metab O.R. proc w MCC	3.6893
629,MDC 10P,Other endocrine, nutrit & metab O.R. proc w CC	2.3228
630,MDC 10P,Other endocrine, nutrit & metab O.R. proc w/o CC/MCC	1.4488
637,MDC 10M,Diabetes w MCC	1.3857
638,MDC 10M,Diabetes w CC	0.8841
639,MDC 10M,Diabetes w/o CC/MCC	0.6132
640,MDC 10M,Misc disorders of nutrition, metabolism, fluids/electrolytes w MCC	1.2142
641,MDC 10M,Misc disorders of nutrition, metabolism, fluids/electrolytes w/o MCC	0.7566
642,MDC 10M,Inborn and other disorders of metabolism	1.2158
643,MDC 10M,Endocrine disorders w MCC	1.6255
644,MDC 10M,Endocrine disorders w CC	1.0281

DRG, MDC, and DRG description	DRG cost weight
645,MDC 10M,Endocrine disorders w/o CC/MCC	0.7652
652,MDC 11P,Kidney transplant	3.3849
653,MDC 11P,Major bladder procedures w MCC	5.5365
654,MDC 11P,Major bladder procedures w CC	2.8122
655,MDC 11P,Major bladder procedures w/o CC/MCC	2.0624
656,MDC 11P,Kidney & ureter procedures for neoplasm w MCC	3.2606
657,MDC 11P,Kidney & ureter procedures for neoplasm w CC	1.9342
658,MDC 11P,Kidney & ureter procedures for neoplasm w/o CC/MCC	1.5699
659,MDC 11P,Kidney & ureter procedures for non-neoplasm w MCC	2.6798
660,MDC 11P,Kidney & ureter procedures for non-neoplasm w CC	1.4207
661,MDC 11P,Kidney & ureter procedures for non-neoplasm w/o CC/MCC	1.0901
662,MDC 11P,Minor bladder procedures w MCC	3.1647
663,MDC 11P,Minor bladder procedures w CC	1.5234
664,MDC 11P,Minor bladder procedures w/o CC/MCC	1.1066
665,MDC 11P,Prostatectomy w MCC	2.9685
666,MDC 11P,Prostatectomy w CC	1.7691
667,MDC 11P,Prostatectomy w/o CC/MCC	0.9387
668,MDC 11P,Transurethral procedures w MCC	2.7883
669,MDC 11P,Transurethral procedures w CC	1.5457
670,MDC 11P,Transurethral procedures w/o CC/MCC	0.9787
671,MDC 11P,Urethral procedures w CC/MCC	1.8276
672,MDC 11P,Urethral procedures w/o CC/MCC	1.0332
673,MDC 11P,Other kidney & urinary tract procedures w MCC	3.5746
674,MDC 11P,Other kidney & urinary tract procedures w CC	2.4442
675,MDC 11P,Other kidney & urinary tract procedures w/o CC/MCC	1.6320
682,MDC 11M,Renal failure w MCC	1.4780
683,MDC 11M,Renal failure w CC	0.8973
684,MDC 11M,Renal failure w/o CC/MCC	0.6153
686,MDC 11M,Kidney & urinary tract neoplasms w MCC	1.7561

DRG, MDC, and DRG description	DRG cost weight
687,MDC 11M,Kidney & urinary tract neoplasms w CC	1.0526
688,MDC 11M,Kidney & urinary tract neoplasms w/o CC/MCC	0.7713
689,MDC 11M,Kidney & urinary tract infections w MCC	1.1186
690,MDC 11M,Kidney & urinary tract infections w/o MCC	0.7908
693,MDC 11M,Urinary stones w MCC	1.3533
694,MDC 11M,Urinary stones w/o MCC	0.7404
695,MDC 11M,Kidney & urinary tract signs & symptoms w MCC	1.1723
696,MDC 11M,Kidney & urinary tract signs & symptoms w/o MCC	0.6794
697,MDC 11M,Urethral stricture	0.9739
698,MDC 11M,Other kidney & urinary tract diagnoses w MCC	1.6186
699,MDC 11M,Other kidney & urinary tract diagnoses w CC	1.0327
700,MDC 11M,Other kidney & urinary tract diagnoses w/o CC/MCC	0.7417
707,MDC 12P,Major male pelvic procedures w CC/MCC	1.8699
708,MDC 12P,Major male pelvic procedures w/o CC/MCC	1.4520
709,MDC 12P,Penis procedures w CC/MCC	2.4056
710,MDC 12P,Penis procedures w/o CC/MCC	1.5358
711,MDC 12P,Testes procedures w CC/MCC	2.1432
712,MDC 12P,Testes procedures w/o CC/MCC	1.0202
713,MDC 12P,Transurethral prostatectomy w CC/MCC	1.4620
714,MDC 12P,Transurethral prostatectomy w/o CC/MCC	0.9154
715,MDC 12P,Other male reproductive system O.R. proc for malignancy w CC/MCC	2.1365
716,MDC 12P,Other male reproductive system O.R. proc for malignancy w/o CC/MCC	1.4655
717,MDC 12P,Other male reproductive system O.R. proc exc malignancy w CC/MCC	1.7643
718,MDC 12P,Other male reproductive system O.R. proc exc malignancy w/o CC/MCC	1.2194
722,MDC 12M,Malignancy, male reproductive system w MCC	1.8049
723,MDC 12M,Malignancy, male reproductive system w CC	1.1074

DRG, MDC, and DRG description	DRG cost weight
724,MDC 12M,Malignancy, male reproductive system w/o CC/MCC	0.5904
725,MDC 12M,Benign prostatic hypertrophy w MCC	1.2554
726,MDC 12M,Benign prostatic hypertrophy w/o MCC	0.7647
727,MDC 12M,Inflammation of the male reproductive system w MCC	1.4273
728,MDC 12M,Inflammation of the male reproductive system w/o MCC	0.8025
729,MDC 12M,Other male reproductive system diagnoses w CC/MCC	1.0739
730,MDC 12M,Other male reproductive system diagnoses w/o CC/MCC	0.6316
734,MDC 13P,Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC	2.1919
735,MDC 13P,Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC	1.3742
736,MDC 13P,Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	4.3209
737,MDC 13P,Uterine & adnexa proc for ovarian or adnexal malignancy w CC	1.9871
738,MDC 13P,Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC	1.3789
739,MDC 13P,Uterine, adnexa proc for non-ovarian/adnexal malig w MCC	3.7445
740,MDC 13P,Uterine, adnexa proc for non-ovarian/adnexal malig w CC	1.7849
741,MDC 13P,Uterine, adnexa proc for non-ovarian/adnexal malig w/o CC/MCC	1.3295
742,MDC 13P,Uterine & adnexa proc for non-malignancy w CC/MCC	1.6895
743,MDC 13P,Uterine & adnexa proc for non-malignancy w/o CC/MCC	1.1485
744,MDC 13P,D&C, conization, laparoscopy & tubal interruption w CC/MCC	1.7405
745,MDC 13P,D&C, conization, laparoscopy & tubal interruption w/o CC/MCC	1.0653
746,MDC 13P,Vagina, cervix & vulva procedures w CC/MCC	1.6310
747,MDC 13P,Vagina, cervix & vulva procedures w/o CC/MCC	0.9322
748,MDC 13P,Female reproductive system reconstructive procedures	1.3217
749,MDC 13P,Other female reproductive system O.R. procedures w CC/MCC	2.5922
750,MDC 13P,Other female reproductive system O.R. procedures w/o CC/MCC	1.3312
754,MDC 13M,Malignancy, female reproductive system w MCC	1.7619
755,MDC 13M,Malignancy, female reproductive system w CC	1.0238
756,MDC 13M,Malignancy, female reproductive system w/o CC/MCC	0.8768
757,MDC 13M,Infections, female reproductive system w MCC	1.4203

DRG, MDC, and DRG description	DRG cost weight
758,MDC 13M,Infections, female reproductive system w CC	0.9654
759,MDC 13M,Infections, female reproductive system w/o CC/MCC	0.6603
760,MDC 13M,Menstrual & other female reproductive system disorders w CC/MCC	0.9025
761,MDC 13M,Menstrual & other female reproductive system disorders w/o CC/MCC	0.5654
768,MDC 14P,Vaginal delivery w O.R. proc except steril &/or D&C	1.0075
769,MDC 14P,Postpartum & post abortion diagnoses w O.R. procedure	1.4430
770,MDC 14P,Abortion w D&C, aspiration curettage or hysterotomy	0.7863
776,MDC 14M,Postpartum & post abortion diagnoses w/o O.R. procedure	0.7099
779,MDC 14M,Abortion w/o D&C	1.1418
783,MDC 14P,Cesarean section w sterilization w MCC	2.1448
784,MDC 14P,Cesarean section w sterilization w CC	1.0452
785,MDC 14P,Cesarean section w sterilization w/o CC/MCC	0.8584
786,MDC 14P,Cesarean section w/o sterilization w MCC	1.7145
787,MDC 14P,Cesarean section w/o sterilization w CC	1.0455
788,MDC 14P,Cesarean section w/o sterilization w/o CC/MCC	0.9062
789,MDC 15M,Neonates, died or transferred to another acute care facility	1.6900
790,MDC 15M,Extreme immaturity or respiratory distress syndrome, neonate	5.5730
791,MDC 15M,Prematurity w major problems	3.8062
792,MDC 15M,Prematurity w/o major problems	2.2965
793,MDC 15M,Full term neonate w major problems	3.9097
794,MDC 15M,Neonate w other significant problems	1.3838
795,MDC 15M,Normal newborn	0.1873
796,MDC 14P,Vaginal delivery w sterilization/D&C w MCC	1.9723
797,MDC 14P,Vaginal delivery w sterilization/D&C w CC	0.8628
798,MDC 14P,Vaginal delivery w sterilization/D&C w/o CC/MCC	0.8628
799,MDC 16P,Splenectomy w MCC	4.9443
800,MDC 16P,Splenectomy w CC	2.8420
801,MDC 16P,Splenectomy w/o CC/MCC	1.8732

DRG, MDC, and DRG description	DRG cost weight
802,MDC 16P,Other O.R. proc of the blood & blood forming organs w MCC	3.1524
803,MDC 16P,Other O.R. proc of the blood & blood forming organs w CC	1.7816
804,MDC 16P,Other O.R. proc of the blood & blood forming organs w/o CC/MCC	1.3626
805,MDC 14M,Vaginal delivery w/o sterilization/D&C w MCC	1.0407
806,MDC 14M,Vaginal delivery w/o sterilization/D&C w CC	0.7092
807,MDC 14M,Vaginal delivery w/o sterilization/D&C w/o CC/MCC	0.6268
808,MDC 16M,Major hematol/immun diag exc sickle cell crisis & coagul w MCC	2.1296
809,MDC 16M,Major hematol/immun diag exc sickle cell crisis & coagul w CC	1.2159
810,MDC 16M,Major hematol/immun diag exc sickle cell crisis & coagul w/o CC/MCC	0.9354
811,MDC 16M,Red blood cell disorders w MCC	1.3403
812,MDC 16M,Red blood cell disorders w/o MCC	0.8707
813,MDC 16M,Coagulation disorders	1.5852
814,MDC 16M,Reticuloendothelial & immunity disorders w MCC	1.7491
815,MDC 16M,Reticuloendothelial & immunity disorders w CC	1.0128
816,MDC 16M,Reticuloendothelial & immunity disorders w/o CC/MCC	0.7159
817,MDC 14P,Other antepartum diagnoses w O.R. procedure w MCC	2.5162
818,MDC 14P,Other antepartum diagnoses w O.R. procedure w CC	1.2739
819,MDC 14P,Other antepartum diagnoses w O.R. procedure w/o CC/MCC	0.7979
820,MDC 17P,Lymphoma & leukemia w major O.R. procedure w MCC	5.7167
821,MDC 17P,Lymphoma & leukemia w major O.R. procedure w CC	2.2323
822,MDC 17P,Lymphoma & leukemia w major O.R. procedure w/o CC/MCC	1.2644
823,MDC 17P,Lymphoma & non-acute leukemia w other proc w MCC	4.2302
824,MDC 17P,Lymphoma & non-acute leukemia w other proc w CC	2.3251
825,MDC 17P,Lymphoma & non-acute leukemia w other proc w/o CC/MCC	1.3545
826,MDC 17P,Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC	5.0150
827,MDC 17P,Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC	2.3162
828,MDC 17P,Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC	1.6512

DRG, MDC, and DRG description	DRG cost weight
829,MDC 17P,Myeloproliferative disorders or poorly differentiated neoplasms w other procedure w CC/MCC	3.1399
830,MDC 17P,Myeloproliferative disorders or poorly differentiated neoplasms w other procedure w/o CC/MCC	1.3788
831,MDC 14M,Other antepartum diagnoses w/o O.R. procedure w MCC	1.0785
832,MDC 14M,Other antepartum diagnoses w/o O.R. procedure w CC	0.7155
833,MDC 14M,Other antepartum diagnoses w/o O.R. procedure w/o CC/MCC	0.5321
834,MDC 17M,Acute leukemia w/o major O.R. procedure w MCC	5.8425
835,MDC 17M,Acute leukemia w/o major O.R. procedure w CC	2.0282
836,MDC 17M,Acute leukemia w/o major O.R. procedure w/o CC/MCC	1.3176
837,MDC 17M,Chemo w acute leukemia as sdx or w high dose chemo agent w MCC	5.9908
838,MDC 17M,Chemo w acute leukemia as sdx w CC or high dose chemo agent	2.1879
839,MDC 17M,Chemo w acute leukemia as sdx w/o CC/MCC	1.2762
840,MDC 17M,Lymphoma & non-acute leukemia w MCC	3.1952
841,MDC 17M,Lymphoma & non-acute leukemia w CC	1.6117
842,MDC 17M,Lymphoma & non-acute leukemia w/o CC/MCC	1.1466
843,MDC 17M,Other myeloprolif dis or poorly diff neopl diag w MCC	1.9078
844,MDC 17M,Other myeloprolif dis or poorly diff neopl diag w CC	1.2080
845,MDC 17M,Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC	0.8659
846,MDC 17M,Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	2.6266
847,MDC 17M,Chemotherapy w/o acute leukemia as secondary diagnosis w CC	1.3159
848,MDC 17M,Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC/MCC	0.9814
849,MDC 17M,Radiotherapy	2.1258
853,MDC 18P,Infectious & parasitic diseases w O.R. procedure w MCC	5.0986
854,MDC 18P,Infectious & parasitic diseases w O.R. procedure w CC	2.1612
855,MDC 18P,Infectious & parasitic diseases w O.R. procedure w/o CC/MCC	1.6033
856,MDC 18P,Postoperative or post-traumatic infections w O.R. proc w MCC	4.4257
857,MDC 18P,Postoperative or post-traumatic infections w O.R. proc w CC	2.0333

DRG, MDC, and DRG description	DRG cost weight
858,MDC 18P,Postoperative or post-traumatic infections w O.R. proc w/o CC/MCC	1.3764
862,MDC 18M,Postoperative & post-traumatic infections w MCC	1.8506
863,MDC 18M,Postoperative & post-traumatic infections w/o MCC	0.9880
864,MDC 18M,Fever and inflammatory conditions	0.8474
865,MDC 18M,Viral illness w MCC	1.3933
866,MDC 18M,Viral illness w/o MCC	0.8187
867,MDC 18M,Other infectious & parasitic diseases diagnoses w MCC	2.1852
868,MDC 18M,Other infectious & parasitic diseases diagnoses w CC	1.0970
869,MDC 18M,Other infectious & parasitic diseases diagnoses w/o CC/MCC	0.7425
870,MDC 18M,Septicemia or severe sepsis w MV >96 hours	6.3243
871,MDC 18M,Septicemia or severe sepsis w/o MV >96 hours w MCC	1.8663
872,MDC 18M,Septicemia or severe sepsis w/o MV >96 hours w/o MCC	1.0393
876,MDC 19P,O.R. procedure w principal diagnoses of mental illness	3.6400
880,MDC 19M,Acute adjustment reaction & psychosocial dysfunction	0.8569
881,MDC 19M,Depressive neuroses	0.8193
882,MDC 19M,Neuroses except depressive	0.7898
883,MDC 19M,Disorders of personality & impulse control	1.3366
884,MDC 19M,Organic disturbances & intellectual disability	1.4380
885,MDC 19M,Psychoses	1.2154
886,MDC 19M,Behavioral & developmental disorders	1.3456
887,MDC 19M,Other mental disorder diagnoses	1.0881
894,MDC 20M,Alcohol/drug abuse or dependence, left AMA	0.5804
895,MDC 20M,Alcohol/drug abuse or dependence w rehabilitation therapy	1.6269
896,MDC 20M,Alcohol/drug abuse or dependence w/o rehabilitation therapy w MCC	1.7197
897,MDC 20M,Alcohol/drug abuse or dependence w/o rehabilitation therapy w/o MCC	0.8218
901,MDC 21P,Wound debridements for injuries w MCC	4.3272
902,MDC 21P,Wound debridements for injuries w CC	1.9669

DRG, MDC, and DRG description	DRG cost weight
903,MDC 21P,Wound debridements for injuries w/o CC/MCC	1.1440
904,MDC 21P,Skin grafts for injuries w CC/MCC	3.5374
905,MDC 21P,Skin grafts for injuries w/o CC/MCC	1.6644
906,MDC 21P,Hand procedures for injuries	1.7409
907,MDC 21P,Other O.R. procedures for injuries w MCC	3.9896
908,MDC 21P,Other O.R. procedures for injuries w CC	2.0631
909,MDC 21P,Other O.R. procedures for injuries w/o CC/MCC	1.3187
913,MDC 21M,Traumatic injury w MCC	1.4763
914,MDC 21M,Traumatic injury w/o MCC	0.8617
915,MDC 21M,Allergic reactions w MCC	1.6991
916,MDC 21M,Allergic reactions w/o MCC	0.6332
917,MDC 21M,Poisoning & toxic effects of drugs w MCC	1.4632
918,MDC 21M,Poisoning & toxic effects of drugs w/o MCC	0.7840
919,MDC 21M,Complications of treatment w MCC	1.8253
920,MDC 21M,Complications of treatment w CC	1.0075
921,MDC 21M,Complications of treatment w/o CC/MCC	0.6906
922,MDC 21M,Other injury, poisoning & toxic effect diag w MCC	1.6036
923,MDC 21M,Other injury, poisoning & toxic effect diag w/o MCC	0.8655
927,MDC 22P,Extensive burns or full thickness burns w MV >96 hrs w skin graft	19.9435
928,MDC 22P,Full thickness burn w skin graft or inhal inj w CC/MCC	6.1949
929,MDC 22P,Full thickness burn w skin graft or inhal inj w/o CC/MCC	2.9415
933,MDC 22M,Extensive burns or full thickness burns w MV >96 hrs w/o skin graft	3.1402
934,MDC 22M,Full thickness burn w/o skin graft or inhal inj	1.8098
935,MDC 22M,Non-extensive burns	1.9323
939,MDC 23P,O.R. proc w diagnoses of other contact w health services w MCC	3.6544
940,MDC 23P,O.R. proc w diagnoses of other contact w health services w CC	2.2718
941,MDC 23P,O.R. proc w diagnoses of other contact w health services w/o CC/MCC	1.9307
945,MDC 23M,Rehabilitation w CC/MCC	1.4553

DRG, MDC, and DRG description	DRG cost weight
946,MDC 23M,Rehabilitation w/o CC/MCC	1.0870
947,MDC 23M,Signs & symptoms w MCC	1.1973
948,MDC 23M,Signs & symptoms w/o MCC	0.7796
949,MDC 23M,Aftercare w CC/MCC	1.0889
950,MDC 23M,Aftercare w/o CC/MCC	0.7409
951,MDC 23M,Other factors influencing health status	0.5865
955,MDC 24P,Craniotomy for multiple significant trauma	6.0805
956,MDC 24P,Limb reattachment, hip & femur proc for multiple significant trauma	3.9233
957,MDC 24P,Other O.R. procedures for multiple significant trauma w MCC	7.5337
958,MDC 24P,Other O.R. procedures for multiple significant trauma w CC	4.1909
959,MDC 24P,Other O.R. procedures for multiple significant trauma w/o CC/MCC	2.8005
963,MDC 24M,Other multiple significant trauma w MCC	2.7251
964,MDC 24M,Other multiple significant trauma w CC	1.4935
965,MDC 24M,Other multiple significant trauma w/o CC/MCC	0.9171
969,MDC 25P,HIV w extensive O.R. procedure w MCC	5.8027
970,MDC 25P,HIV w extensive O.R. procedure w/o MCC	2.9170
974,MDC 25M,HIV w major related condition w MCC	2.6739
975,MDC 25M,HIV w major related condition w CC	1.3420
976,MDC 25M,HIV w major related condition w/o CC/MCC	0.9142
977,MDC 25M,HIV w or w/o other related condition	1.3005
981,MDC P,Extensive O.R. procedure unrelated to principal diagnosis w MCC	4.4907
982,MDC P,Extensive O.R. procedure unrelated to principal diagnosis w CC	2.4381
983,MDC P,Extensive O.R. procedure unrelated to principal diagnosis w/o CC/MCC	1.6371
987,MDC P,Non-extensive O.R. proc unrelated to principal diagnosis w MCC	3.3337
988,MDC P,Non-extensive O.R. proc unrelated to principal diagnosis w CC	1.7183
989,MDC P,Non-extensive O.R. proc unrelated to principal diagnosis w/o CC/MCC	1.1524
998,MDC ,Principal diagnosis invalid as discharge diagnosis	0.0000

DRG, MDC, and DRG description	DRG cost weight
999,MDC ,Ungroupable	0.0000

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